The Education Digest

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No Single Method Insures It

The Nature of Good Teaching

HOLLIS L. CASWELL

In School and Society

WHAT is good teaching? Are there carefully evolved standards for the work of the teacher? Can one readily distinguish between good and poor teaching, and know the reasons why?

Carefully developed answers to these questions will go a long way in helping to clarify positions on educational issues and in aiding one to determine what educational changes he considers desirable.

In the following paragraphs I shall indicate a few of the most important characteristics of good teaching. Each characteristic carries implications for learning, because desirable learning is the goal of teaching and teaching can be tested only in terms of the quality of learning to which it leads.

1. Good teaching is concerned with helping the pupil develop meaning and understanding. There is a great tendency to equate education and command of facts. As a result, teaching often emphasizes memorization of prescribed bodies of knowledge. But modern research has shown that the ability to recite facts is a very different thing from understanding the meaning of those facts and having the ability to apply them to the solution of problems. The "walking encyclopedia" is not a fit ideal for modern education. We could produce a generation of quiz kids and fail to meet our real education needs.

Education that is worthy of the name helps people understand why things are as they are; it enables them to sense the meanings in situations. Reading is not calling off a list of words; it is getting the meaning lying back of the words. Mathematics is not primarily being able to manipulate numbers; it is understanding numerical and spatial relationships and being able to apply mathematical processes to make a situation meaningful and manageable.

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Teaching that is concerned with meaning and understanding must be close to the pupil; it must build on his own experiences; it must relate to the things he knows and understands. The only way to take a person from the known to the unknown is to start where he is, and good teaching is largely a process of guiding a student from the known to the unknown.

First-hand experience is particularly important in providing an education which develops meaning and understanding. A young child can read with *meaning* a story about his own experiences in coming to school; a story unrelated to his experiences becomes largely word-calling.

INFLUENCING BEHAVIOR

2. Good teaching is concerned with influencing the behavior of pupils. Recently, one of England's and America's greatest philosophers, Alfred North Whitehead, stated the idea, "There is only one subject matter for education, and that is life in all its manifestations."

A great deal of teaching has overlooked this standard. There are many teachers of literature who become so engrossed with seeing that pupils gain certain knowledge about literary selections that they minimize or ignore the effects of their teaching on pupil behavior. The real test of the teaching of literature is to be found in the reading habits students form and continue after the course is over. It is better not to teach literature at all than it is to teach students to hate good literature.

Similarly in other fields, teaching should be directed at changing behavior. In citizenship instruction, the central purpose is to get pupils to behave as good citizens. Much knowledge and many skills are essential to achieving this end. But when the mastery of knowledge and skills becomes an end in itself and behavior is forgotten, the real reason for the support of popular education in our country is subverted.

3. Good teaching is concerned with the student as a person and with his general development. Good teaching is a very personal matter. Review your own experience and recall the teachers who stood out, who made an important contribution to your development. Are they not the ones who took a personal interest in you, who saw your potentialities, who encouraged you to higher aspirations than you alone would have held?

With rare exceptions, the answer to this question will be in the affirmative.

4. Good teaching recognizes individual differences among pupils and adjusts instruction to them. One of the striking facts in a system which provides elementary and secondary education for all the children of all the people is the great diversity of ability which must be considered. The range of potentialities and interest is as wide as the population, and as a consequence, the variability of achieve-

ment in any field is tremendous. In a school system which provides for all, there is no way to eliminate these differences. They must be accepted and adjustments must be made to them.

To make these adjustments is one of the most important elements of good teaching in American schools, for only in this way can equality of opportunity be provided for all our children. This is a standard which we as yet are far from meeting satisfactorily. But significant progress has been made, and one thing is perfectly clear. It is in those situations, where good teachers can work with groups of pupils of such size that they can study each one individually and provide much small-group and individual instruction, that outstanding teaching is being done. Whenever the individual pupil is lost in a mass, this essential quality of good teaching disappears.

CONTENT AND METHOD

5. In good teaching a teacher must be competent in both content and method. One of the most unfortunate aspects of the development of American education has been the tendency to separate content and method, often throwing them in opposition to each other.

The plain fact is that both content and method are essential ingredients of the equipment of a good teacher. It is high time that the two are blended. It would be as sensible to argue which is more important for the preservation of life, air or water, as it is to argue whether content or method is more important in the competence of a teacher.

6. No single method will insure good teaching. There often has been a tendency in American education to tie good teaching to a particular method. At one time the project method was thought to be the answer, the case method has had wide use in certain professional fields, the lecture method has frequently been damned, and the discussion method has been widely emphasized.

Method *per se* is no guarantee of the quality of instruction. All methods, under certain circumstances, will result in good teaching, and under other circumstances, will result in poor teaching. The nature of the subject, the abilities of the teacher, the status of the pupils, and the availability of instructional materials all determine which method gets the best results. Good teaching adapts methods to purpose, content, pupil status, and teacher ability. It permits and encourages the use of a variety of methods. It finds no panacea in any single one.

What is good teaching? This is a basic question. It strikes at the heart of the whole educational process. Answer it clearly, thoughtfully, and soundly, and you will have one good guide through the uncertainties of the future. Ignore it or answer it with catch phrases and clichés and you are certain to be in for confusion.

"It Shuts Doors for Many Students"

The Tragedy of the Conant Report

JAMES D. KOERNER

In Phi Delta Kappan

ONE of the most influential documents in the history of American education was James B. Conant's *The American High School Today.* Probably the most eagerly awaited, most widely distributed, and best known educational report of the century, its distribution has now exceeded a quarter million copies. Therein, as one follows the effects of this book since its publication, lies its tragedy.

It is tragic not because of its findings and recommendations, which are tragic enough, but because of the unquestioning credence given the book by school boards and parents all over the nation and by public-school teachers and administrators. Because of Mr. Conant's immense personal prestige, as well as the publicity campaign that has accompanied his activities, the book represents, in my opinion, a national disaster.

The tragedy lies in the destiny to which Mr. Conant has consigned as much as 85 percent of American youth. While many points in his book need to be refuted, this particular and crucial point is the one to which I would like to address myself.

The fact that struck me in the face, that horrified me, as I read the report was that I had had, almost perfectly, the kind of public education, Mr. Conant says I—and perhaps 85 percent of my fellows—*should* have had. I had his recommended program, almost item for item, in English, "social studies," "vocational education," and all the rest. Only what I had was not education. Neither was it training. Nor was it even "adjustment." It was an unspeakable abomination.

Mine was a large, comprehensive, Midwestern high school of the type revered by Mr. Conant. The overwhelming majority of its students, being from lower-class homes, did not go directly to college, at least not in the thirties, but went into jobs, the armed services, or sometimes into a business school. My career there, pretty much that of the majority of its students, would have warmed Mr. Conant's heart.

James D. Koerner is former Executive Secretary of the Council for Basic Education. Reported from Phi Delta Kappan, *XLII (December 1960), 121–4.*

Beginning in the ninth grade, I was "counseled." My counselor fulfilled especially well one of Mr. Conant's prime requirements: "The counselors should be sympathetic to the elective programs which develop marketable skills." My counselor asked me the usual questions, including the silliest one of all, "What do you want to be?"

At the time, I happened to have a little business of my own selling ice cream and candy to the habitués of the trucking-warehouse-slaughterhouse section of the city. My travels took me into everything from plush executive offices to rat-infested alleys. One of the plush offices was occupied by an important, amiable person who always bought my ice cream and told me about his early days of struggle. He was an idol of mine for several months, so that when my counselor asked me my intentions in the world, I said I wanted to be an executive like my friend in the plush office. I was signed up for a course in "Bookkeeping"—in the first half of the ninth grade!—which I promptly flunked, and for one in "Shop." I don't recall whether there was supposed to be a connection between these courses.

By the time of the second semester, I had given up both my idol and my entrepreneurial activities and was working as an usher in a second-string theatre. There was much to be said, I felt, for the kind of life led by the theater owners and exhibitors I began to hear about. When the counselor asked me again what I wanted to be, I said (having learned a new word in my new environment), "I want to be a theater magnate."

Pointing out that I had just flunked bookkeeping, he suggested that maybe I had a practical bent. He signed me up for more "Shop" and for a course in "Practical Science," saying these would be good for me, no matter what. I also took the mandatory courses in English and civics, there being no "Practical English" or "Practical Civics" offered at that time.

COUNSELING CONTINUES

My counseling continued, as Mr. Conant recommends. I abandoned my career in the theater for something that paid more reliably and offered more substantial nourishment than popcorn—I was a bus boy in a downtown hotel. On encountering the inevitable question from my new counselor, I allowed that I wouldn't mind owning a string of hotels. Thereupon, I found myself in a year's course in "Business Training," and one in "Personal Typing."

Before my junior year I had given up on hotels, for one can bus dishes only so long, even with cuisine of unaccustomed excellence. I then became a part-time lifeguard at the downtown YMCA. I have forgotten what I said to my counselor but he felt that since it was obvious I was not for college, I should continue building my electives toward, as Mr. Conant puts it, "a significant sequence of

courses . . . leading to the development of a marketable skill." Thus I had "Commercial Geography" and a full course in something called "Merchandising."

MY SENIOR YEAR

My senior year and the war in Europe began at the same time. I decided, like everybody else, that I wanted to be a fighter pilot and that following graduation I would join the Royal Canadian Air Force. My record showed no mathematics whatever and no languages or science worth mentioning—and unpromising grades in everything else except physical education. My senior counselor took a dim view of my RCAF prospects and signed me up for "Salesmanship" and "Commercial Law." As a sop to my irrational ambition, he made room in my program for a new course called "Aviation."

Thus ended my public education. I obviously did not join the RCAF. I took my well-rounded commercial course, my "marketable skill," to market. After considerable searching, I was hired as a stockman in a dime store and after nine months was raised from 25 to 27 cents per hour, whereupon I quit and decided to go to college. I still wanted to be a pilot and two years of college was the standard requirement for admission to the Army Air Force's flying schools. I had no other reason to think about college and no other interest in it.

I sought out a tiny, nonaccredited denominational college that was willing to admit me and provide me with some part-time work. It was at this point that I discovered books.

Although the resources of the school were limited, they brought me into contact for the first time with chemistry, physics, languages, honest-to-goodness history, and, with much gnashing of teeth on my part, some extracurricular elementary mathematics. I liked it all and profited greatly from it all.

After doing enough remedial work, both in college and after enlistment in the Air Force, I passed the requisite examinations, was admitted to flying school, and was graduated therefrom in April 1945.

After separation from the service, I returned at once to college with a true intellectual hunger. In June of 1952 I completed the Ph.D. degree and began a career in teaching.

In all this, my public education was a minus factor of formidable dimension. It was an education which I bitterly regretted almost as soon as I had finished it, and for which I will always pay; and it must stand, I submit, as a disgrace to those "professional educators" in charge of it.

Now, if my experience were unique or even unusual, it would not be worth recording. It is worth recording because my public education was typical of that given countless thousands of American students. It was essentially the kind of education given the majority of my high-school generation,

the generation before mine, the generation after mine, and presumably, under the impetus of reports like Mr. Conant's, it is the education that awaits all future generations.

This little tale of mine exhibits specifically the method, and above all, the spirit that has pervaded public education in the United States for nearly half a century and that Mr. Conant now endorses without qualification, thereby insuring its continued dominance.

It is the method and spirit of utilitarianism. It is a pessimistic and hopeless view of man.

DISASTROUS SPIRIT

It is the *spirit* that informs almost every line of Mr. Conant's report that is so disastrous. Nowhere in this extended study is there even a suggestion, not to say an exposition, of the virtues of a liberal education for all or even a large part of American youth. Everywhere are explicit recommendations for exactly the opposite. With the most tiresome redundancy, the point is made that 80 to 85 percent of American students cannot be educated in any important fashion and are not to be put upon by persons, especially parents, who think they can and should be.

The report is replete with stern admonitions to the parents of 80 to 85 percent of American youth to avoid shoving their children into an academic program. Indeed, it is "the duty," says Mr. Conant, "of the counselors to do all they can to defend students against the unreasonable demands of their parents."

I should like to say to Mr. Conant, having been through precisely what he recommends for 80 or 85 percent of American students, that it is a shabby substitute for a free man's education, that it is an unworthy way to prepare for life in the second half of the twentieth century, that it does not prepare anybody for anything—unless perhaps for a mindless and meaningless existence.

I would suggest to Mr. Conant that nobody has the right to assume that *any* student will not go to college. Nobody has the right to assume that, because a student may think he will not go to college, he should not be educated. Nobody has the right to encourage or coerce students into becoming anything less than they might become—and nobody knows, least of all the students themselves, *what* they might become. In short, nobody has the right to shut intellectual doors.

That is the real tragedy of the Conant report. It shuts a great many doors for a great many students. It has given encyclical status to the idea that our public schools can prepare only a few to live an educated life, and must, therefore, prepare everybody else with "marketable skills." If there was ever a way to create an elite, an intellectual aristocracy of the kind Mr. Conant says he hates to the bottom of his soul, this is it. •

Educational Technology—Boon or Bane?

JOHN FRITZ

In The School Review

SINCE World War II, hundreds of schools and universities have launched experimental programs in the use of closed-circuit and open-circuit television, motion pictures, filmstrips and slides, tape-recording and language laboratories, and more recently, teaching machines. Reactions to this emerging technology are apparently tending in diametrically opposed directions. In some quarters, there has been a disenchantment with the newer audio-visual media and the disenchantment has been followed by a return to conventional teaching practices. In other quarters, there has been a zealous exploitation of motion pictures and television in programs of instruction that encompass ever greater numbers of students.

Since indications suggest that technology in its various forms will attract increased attention from educators in the years ahead, it is important to examine developments in the educational role of such media as film and television and to assess the likelihood that they will lead to substantial gains in learning and achievement in our schools.

Until recently, audio-visual materials were regarded as "aids" to the teacher. Now that these media can store and disseminate subject matter, they are performing functions that had been the exclusive domain of the teacher. They can illustrate, discuss, and analyze concepts and generalizations and systematically prescribe areas for continued student inquiry. It, therefore, seems inappropriate to categorize these materials under the rubric of supplementary aids. They are better regarded as *complementing* the instructional resources of a school program. In doing so, however, they make it necessary to reformulate the conventional role of the teacher in the classroom. This becomes apparent as the research findings in audio-visual communication are appraised.

A review of available data from research and experimentation in the educational use of film and

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television reveals results that are inconclusive and, for the most part, disappointing. With monotonous regularity, the literature reports no real differences in learning achievements between experimental classes taught with the newer media and groups taught by conventional methods.

Any consistent tendency in research data among a variety of studies would suggest that a common factor or the same set of variables may be operating to affect the results. At least two such factors may be identified here: teacher function and behavior in the experimental settings, and students' perceptions of the demands in the learning situation. It is important to explore these factors since in all likelihood they will affect any similar attempts to improve educational practice in the future.

The results of audio-visual research remain incomprehensible until it is recognized that, when film instruction is merely added to the existing program of instruction, a duplication of teaching operations may occur. This outcome is particularly likely when films of the Harvey White variety are used regularly in the classroom. These films are not designed to supplement the efforts of the teacher but to perform a large part of the teaching task. As a result, teachers who attempt to use essentially "complementary" film materials as aids to supplement their personal efforts in conventional ways find that their functions may be displaced. A teacher surrogate now performs the lecture-demonstrations and pursues discussions perhaps even more effectively than the teacher. In this connection, one study included the statement that some teachers resented the fact that the film showing left no time in the class period for them to do any "teaching."

REDEFINE ROLES

The core of the problem is not that film instruction occupied more of the class time but that the teachers were now confronted with the need to redefine and reconstruct their roles and functions. Film and television will scarcely affect the productivity of the educational process if they are not accompanied by important changes in what the teaching staff does. Industry would not have achieved present production had the machine been introduced without major changes in the organization and employment of human effort.

A second area that may explain these inconclusive findings lies in the manner in which student motives and perceptions of the learning process affect the student's participation. One must ask, what is the primary concern of the learner as he proceeds through some learning activity? What is he striving to achieve? Disturbing as it may be, high-school and college students generally do not aspire to learn as much as possible but to demonstrate that degree of mastery that will fetch at least a pass-

ing grade in a given course. The student is most concerned about graduating.

The basic criterion of learning used in these audio-visual studies is one that predominates in educational practice as a whole—the acquisition and mastery of subject matter. Consequently, given a felt need to show acceptable performance, students attempt to seek out the necessary facts from any source available – books, other students, class notes—apart from the experimental use of television and film. Where several avenues of learning exist, the relative effectiveness of experimental methods in teaching becomes difficult to assess.

A more significant form of adaptive behavior that has an indeterminate effect on learning outcomes is the compensatory effort of students. If the prime motivation of a learner is to receive a desired grade in the course, then it is to be expected that the student will not put forth his best effort to learn but will exert himself only to the extent necessary to assure realization of this private goal. He will continue in his preparation until he can say to himself, "I've got it well enough to pass," or "I know enough to get that B."

DIFFERENCES DO EXIST

In the light of this dynamic in student behavior, the results of audio-visual research acquire new meaning and new significance. Taken at face value, the data would lead one to conclude that one teaching procedure is as effective as another and that the ultimate choice in technique can be determined primarily by considerations of cost and convenience. It is likely, however, that real differences in teaching effectiveness between conventional practices and experimental innovations *do* exist, but they may have been obscured by differential student effort in the experimental and control groups.

Partial support for this hypothesis is found in the report of one research project where students taught by film and by teacher reported that they did "less textbook reading, less writing up of assignments, less out-of-class studying, more note-taking, and more paying attention in class than did the students in the control schools."

However these research results are explained, the experimental data still serve to guide school policy and decision-making. Current developments in the practical use of such devices as film and television tend to move in opposite directions. Experiments may induce some schools to revert to more conventional teaching practices, while others are encouraged to pursue broad programs extending instruction through the new media.

One can understand the reluctance of administrators and teachers to pursue the complementary use of television and film in instruction. The problem of lowered teacher morale occasioned by the need to regain professional identity in the teaching process, the vague

apprehension, rarely expressed, of technological unemployment, the difficulties of class scheduling and functional student grouping because of centralized origination of instruction, the modification of inadequate school plant, and the additional costs and administrative problems—all serve to underscore a policy decision that the available research data can be made to support.

Decisions to relegate technology to the periphery of educational practice are based on an inadequate concept of the magnitude of the task of the school. Where resources permit, schools should investigate the extent to which the complementary use of technology can reduce the burden of repetitive, routine, and largely descriptive and expository processes in instruction and provide increased occasion for the professional staff to perform more professional functions in the creative application of insights to teaching and learning problems. Educational technology does not threaten to disenfranchise the classroom teacher. Rather, it promises to provide the teacher greater opportunity to perform more creative functions for more sensitively human ends.

Regrettable as divorce from technology may be, the indiscriminate adoption of the machine on an ever larger scale is likewise premature and may present even greater obstacles in the way of educational improvement.

Since results of research in "mass" education by television appear to suggest that schools can expect learning outcomes at least comparable to those derived from present teaching practices, harried administrators and other concerned groups may view the new media as promising devices with which to solve the problems of growing numbers of students, perennial shortage of qualified teachers, and rising educational costs. Some observers have publicly expressed the need for economies in education and have speculated about the gains that can be realized through the increased mechanization of educational practices.

NEED APPRAISAL

However, any contemplated use of television and film to instruct larger student audiences ought to be carefully appraised in view of the impact of possible adaptive behavior of student and teacher in the process. In the main, such exploitation of technology shows little promise in bringing about changes in student behavior that would indicate a socially significant growth in interest and accomplishment.

In the past, large-scale uses of audio-visual media have taken the form of wide dissemination of conventional, lecture-dominated instruction. From all indications, plans for the future promise to do little more. According to recent releases, the Midwest Airborne Television Instruction Experiment will attempt to reach a large body of high-school and college students by

televising content in up to 24 subject areas—carefully packaged, systematically organized, and expertly presented. On the basis of results from comparable but less ambitious projects, there is little reason to expect marked increases in the learning of the recipients. Unless the instruction enhances the student's interest in the subject, it will likely do little more than approximate conventionally respectable levels of achievement.

To be sure, a teacher surrogate may succeed in communicating some of his enthusiasm for his subject matter to the viewing student. Unless such enthusiasm is nurtured and reinforced in the local environment, the student may, at best, learn somewhat more in the instructional period only to forget more in the course of time. The gap between concrete educational outcomes and social needs threatens to persist.

The relevance to education of ambitious efforts to exploit television and film is twofold. First, there is a distinct possibility that educators and public alike may grow disenchanted with technology and discount prematurely the potential value of these media as facilitators of instruction.

A second concern lies in the very drama and ostentatiousness of large-scale attempts at educational improvement through television. The impact of experimental projects of conspicuous magnitude may camouflage the need for a reappraisal of fundamental learning objectives and outcomes that guide the selection of teaching methods in instruction.

Unless an innovation in teaching technique specifically provides occasion for student inquiry and generates new perceptions of the place and role of the learner in relation to the subject matter, it is unlikely that it will lead to new heights in learning achievement. Continual preoccupation with the immediate demands in organizing and transmitting instruction in great volume tends to divert attention from other key determinants of learning in the receiving situation.

Hence, despite the application of enormous technical and financial resources, and in some cases because of it, current adaptations of technology to education give but little promise of promoting student learning much beyond the prevailing level of inadequate educational accomplishments. •

A CORPORATION wrote another corporation: "Our electronic brain has computed the cost of the work you want done. It amounts to . . ." The following reply was received: "As the amount quoted is more than we anticipated, we suggest that your electronic brain and our electronic brain make an appointment to go over the figures."—From *Texas Outlook*.

Not Any One Factor Responsible

How the Junior-High School Came to Be

JOHN H. LOUNSBURY
In Educational Leadership

THE movement to reorganize secondary education has come a long way since Charles W. Eliot made the suggestion in 1888. From that date until 1909-1910, the reorganization movement remained at the talking stage. Indianola Junior High School of Columbus, Ohio, opened in September 1909, became the first school specifically called a junior-high school. Today, there are 5,000 junior-high schools. The reorganized schools, that is those that deviate from a four-year high school following an eight-year elementary school, now make up 76 percent of the 24,000 secondary schools and enrol 82 percent of the 11 million secondary pupils.

The movement involving the development of the junior-high school, though already quite successful, is relatively young. Yet the institution's existence is long enough so that the history of the junior-high-school movement can be viewed with reasonable objectivity. Our understanding of the present and our vision for the future are incomplete without a knowledge of how and why the junior-high school came to be.

During the 1920's, the junior-high school and its partners in the reorganization movement were rapidly growing educational innovations. In the 1930's the junior-high school, the senior-high school, and the combination junior-senior high school became accepted members of the American school family. By the close of the 1950's, the separate junior-high school followed by the separate senior-high school, had become the predominant pattern of secondary-school organization in the United States. Together these institutions enrolled 50 percent of the secondary-school population.

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The history of the junior-high school parallels the social, economic, and political developments of the half-century which encompasses its life. It was initiated, developed, and grew because a variety of factors, all related to the times and existing educational theory and practice, supported it in one way or another.

Among the factors functioning to aid the growth and development of the junior-high school were: In the 1890's, college officials wanted secondary schools to speed up and improve college preparation; several national committees issued

influential reports supporting reorganization proposals in the period 1892 to 1918; educators were seeking a solution to the appallingly high rate of drop-outs and retardations as revealed by the pioneer studies of Ayers, Strayer, and Thorndike; numerous psychologists, including G. Stanley Hall, supported special institutions as being better for coping with adolescents.

MANY FACTORS

The junior-high school did not develop and grow because of any *one* factor; it grew because of many. It grew because educators aspired to practice new understandings of individual differences which the psychologists were clarifying. It grew because the growing masses of immigrants and urban dwellers required an extensive type of citizenship education. And it grew because it provided a partial solution to the school building shortage caused by World War I and again by World War II.

Nor can the credit for the junior-high school be given to any one individual; not to Eliot, not to Thorndike, not to Hall. Many individuals contributed to the development. In some instances, the champions came from different philosophical camps. Public-school leaders were concerned with meeting immediate needs and viewed the junior high as a means, board of education members may have seen reorganization as an economy move, while teachers may have supported reorganization for the new and improved special facilities it would bring.

Over the long haul, however, a dominant factor undergirding the successful development of the junior-high school, has been the desire of educators to provide an appropriate educational program for early adolescence. This desire was both an original impetus and a continuing concern. Without denying the assistance of other factors in the development of the junior-high school, it can be noted that the support of some of these factors has not been sustained.

The movement's first fatality, for instance, was the economy of time, the original reason for reorganization. The drop-out problem, which motivated many early efforts to reorganize, has largely been resolved at the junior-high-school level. The assistance which the junior-high school received from the guidance movement is now given to other schools as well. But the attempt to provide an effective educational program based on the nature of young adolescents remains as the basic theme of the junior-high-school movement.

Junior-high-school growth seems also to have been assisted by many chronological coincidences. The way a variety of developments worked together to the advantage of the reorganization movement is at least a partial explanation for the notable success which the movement has enjoyed.

There is the coincidence of G.

Stanley Hall publishing his volumes on adolescence in 1905. What if he had published his works in 1925? What if the school building shortage caused by World War I had come *before* the series of committee reports dealing with reorganization rather than *after*? What if the drop-out studies had been made in the 1880's rather than in 1907-1911? What if the movement to chart individual differences had come about before any mention of reorganization had been made?

A number of similar questions might be posed, and probably would be equally difficult to answer. They are, perhaps, purely academic, yet they serve to point up how important the chronological convergence of numerous factors was to the growth and development of the junior-high school.

In summary, many factors worked together to cause the inauguration and early success of the crusade to reorganize secondary education. The original impetus for reorganization came from the colleges and was concerned with economy of time and with college preparation. Discussions about reorganization then began to broaden their base and proposals became linked with other school problems, such as the high rate of elimination and retardation. Psychology furnished studies offering further justification. The culture provided fertile soil for the seeds of reorganization whether planted by college presidents, by public-school administrators, by psychologists, or by professional educators. So the movement to reorganize secondary education, coming at a propitious time, prospered.

The junior-high school may not have been all that many hoped it would be. It may never have proved itself on some counts, yet it has achieved marked success in its relatively brief history. Many new educational practices and ideas have been tested in the junior-high school. More experimentation is in the offing, as glimpses of the future are beginning to come into clearer focus. The junior-high-school story is unfinished; its success to date augurs well for the future. •

Junior-High-School Teachers

HE who would teach junior-high-school youth must possess other unique qualities, but suffice it to say that a vital element in the enterprise to insure a square deal for this "awkward-age" pupil is a worthy model for emulation. One frustrated lad was heard to remark, "Two things in life I've had are ample—good advice and bad example." Unfortunately, our youth do get good advice in ladles and good examples in teaspoons.—M. Dale Baughman in *Educational Leadership*.

Three CBE Leaders State Their Beliefs

An Interview with the Council for Basic Education

In School Management

THE Council for Basic Education is one of the most talked about and controversial organizations in the educational field. But a close look at the statements of CBE's friends and enemies indicates that perhaps neither really knows what the organization is all about.

Where does the CBE really stand? Is it really the enemy of the National Education Association and the darling of Admiral Rickover?

Recently, a *School Management* editor interviewed three of CBE's top leaders: Thomas Bledsoe, executive secretary of CBE, a former professor at Illinois University; Mortimer Smith, editor of CBE's monthly bulletin and a former free-lance writer who became interested in education; and Samuel Withers, associate secretary of CBE, who is on leave from his position as a high-school English teacher in Scarsdale, N. Y.

The sole intent of the interview was to gain information and to find out where the CBE stands on major issues in education. The following questions and answers are taken from the transcript of the tape-recorded interview.

Question: *Gentlemen, as you see it, is there anything good about education in the public schools of today?*

Bledsoe: Certainly. There's a lot that's good. But there's a lot that's bad, too. The Council for Basic Education is not in business to attack the schools—we're in business to improve them. We feel that anybody who says, "Everything is all right in the schools today," is just blind. And yet, an awful lot of people in education seem to think that way. When we point out some of the bad things in education, it is not just for the purpose of pointing a finger. It is for the purpose of getting them improved.

Question: *What are some of these bad things that you see? Where would you start?*

Bledsoe: I think the best place to start is right in the first grade—with the reading program. This is perhaps the best example of what is wrong with the schools today. During the past 30 years, there has been a shift from the old phonic method of teaching reading to the "look-say" method. The result has been that many, many people graduate from elementary

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school—and even from high school—without knowing how to read.

Question: Many educators say that this is a fake controversy that you have thought up. They say that the phonic method is being used in the schools and that it is being combined with the newer and more progressive look-say method. Would you agree with this?

Smith: I would say that many of these educators of whom you speak don't always know what is going on in the field of reading instruction. The standard position of the reading experts is that phonic instruction is something that must be delayed. There is a fundamental difference between the use of phonics in an incidental fashion and the systematic use of phonics from the beginning as the basic method for teaching reading.

Withers: Actually, it's impossible to get systematic phonic instruction widely practiced in America's schools today because there's no reading series generally available that is based on anything but the look-say method. To teach phonics a teacher must either construct her own system or persuade the administration to buy one of the many successful supplementary phonics systems. This requires a lot of initiative and additional expense, and still leaves the students reading the limited vocabulary of the look-say readers.

Smith: More emphasis is placed today on "reading readiness" than on teaching. This is part of the life-adjustment business—not forcing a child to read until some tests show he's ready.

Question: You think, then, that all children should be expected to read at exactly the same time—presumably in the first grade?

Bledsoe: Not at all. But the reading-readiness idea has been carried to such an extreme that there are schools where children do not start reading until they're in the third, fourth, or fifth grades. But when a child enters school, the one thing he wants to learn more than anything else is how to read. I think it is very thwarting for him to find that the teacher doesn't think he's ready.

OTHER SUBJECTS

Question: How about some of the other elementary-school subjects? Do we have problems there, too?

Bledsoe: We feel very strongly that history and geography and what used to be called civics have been weakened and watered down by the introduction of the so-called social studies.

Question: Would you want students to go out on field trips?

Smith: I think a great deal of the field trips come under the heading of boondoggling. I certainly would want to be very careful that the field trips really had some relation to the learning process and weren't just extended recess periods.

Question: Would you want to eliminate such things as clerical

programs in the high schools — typing, stenography, home economics, and things like that?

Smith: My feeling is that these are useful skills, although homemaking, for example, tends to get tremendously out of hand. I don't think they are proper subjects for academic credit. I do not think they should be taught *instead* of academic subjects. If they can be taught in addition to, or in off hours, then they can be useful. But the general tendency in high schools today is to make a course in home economics, for example, equal in credit, and therefore academically equivalent, to a course in English. This doesn't make any sense to us. I think it has become a way of nibbling at and drastically cutting down the academic content of the curriculum.

Withers: I wouldn't go quite so far as you've gone. I would give perhaps a half credit to courses like this—assume that they are secondary. I think we ought to make a distinction, too, on tracks. If you have a school large enough to have a four-track system, these courses could have more weight in the fourth track than in the other three.

VOCATIONAL EDUCATION

Question: These courses that we have been discussing really fall somewhere between the academic and the truly vocational courses. Where does vocational education fit in the schools?

Bledsoe: It really doesn't. Vocational education is very expensive education. When you start equipping machine shops you're getting into money. Furthermore, we doubt the real value of vocational education. A student who learns to run a tractor, because his school is in an agricultural area, is not going to find much use for this skill if he moves to the big city. On the other hand, if he learns to read and to write and to reason, he can use these skills no matter what part of the country he lives in.

Smith: Another objection to vocational education is that a lot of it, of necessity, tends to be out of date. If you equip shops in a society that changes technologically as rapidly as we do, it's hard to keep up with the times.

Question: A great number of these vocational programs are used to hold on to students who otherwise would leave the schools. Isn't this important?

Bledsoe: This is an awfully pessimistic attitude. I don't think there are so many students who are not salvageable so far as education is concerned.

Question: This is an attempt to salvage them, is it not?

Bledsoe: Not educationally. This is an attempt to interest them in something that has no real relation to education. I'm not sure that we can afford to give up so easily, especially at the present time. I think the Council for Basic Education would certainly feel as strongly as any organization in the country that we ought to make the attempt to really educate, genuinely educate,

far more than we are attempting to do now.

Smith: The boys that you shuffle off to machine shop, because you decide you've got to keep them in school and you can't teach them anything, are our future voters and and citizens. If we give up on them at this stage in their learning, we've also given up on them implicitly in the second stage.

Question: Did the type of education you favor ever exist in the United States?

Smith: Not for the whole population.

Question: Did it ever exist at all?

Smith: I would be hard put to substantiate this, but I suspect there was some period, perhaps about 1915, when the public schools in this country more nearly approximated what we are after. There existed then a combination of traditional education with the best of the early progressive. Certainly the whole life-adjustment movement hadn't arisen at that period. The public schools were, I think, more committed in those days to the intellectual training that we're talking about.

Bledsoe: True. But, on the other hand, if overnight you could introduce the schools of 1915 in 1960, you would have no solution to the educational problems of our present time.

Question: Aren't the very same people who were brought up in these schools of 1915 the ones who are leading today's schools? Isn't the product of this education of 1915 providing the leadership that you oppose today?

Bledsoe: Basic education, thank God, is no guarantee that people are going to come out thinking the same thing. But really, I deplore this comparison with 1915 because I think it is irrelevant. This is especially so because one of the stock criticisms of what we're trying to say is "They want to go back to the good old days."

There never were any good old days in the terms that we're talking about. What we need is a good new day in which we will try to really give adequate intellectual training to 80 or 85 percent of the students. This demands a lot of work and experimentation. And it means teaching things that we ought to be really working on and that most schools aren't. •

It's Ketching

AN English teacher tacked on her bulletin board a clipping torn from a professional journal which stated, "Only one in 100 high-school students can write a five-minute theme without making a mistake in spelling or grammar." Underneath it she wrote: "Class, if I keep on grading papers with 'prowd' and 'appretiate' in them the rest of this semester, I'm soon knot goen two be abl to spel iether."—From *Mississippi Educational Advance*.

1961

No Simple Solution to a Complex Problem

Grouping Practices

CELIA B. STENDLER

In Those First School Years

FOR educators, the decade of the fifties will stand out as that span of time which saw a greater ferment in education than any previous decade, except perhaps for the thirties when the progressive education movement was most virile.

The elementary school, instead of being primarily concerned with curriculum reform, as has the secondary school, has largely concerned itself with organizational changes designed to group children more efficiently for individual differences. These include some plans in vogue years ago and later rejected, and some that are genuinely new and different. Here we will be largely concerned with three widely discussed plans for grouping pupils.

The graded elementary school with selfcontained classrooms, mixed in ability and for the most part homogeneous in age, has been until fairly recently the most prevalent pattern of organization. Certain portions of the elementary curriculum were assigned to each grade and a pupil was expected to complete that portion before moving on to the next.

Defects in this concept of grade standards became obvious. Fast learners could complete the work of the grade in much less than a year's time, while slow learners required more time. Retarding all pupils who could not meet the grade-level standard had such deleterious effects that many schools practiced "social" promotion.

At the same time, more teachers began to accept the philosophy that within limits the curriculum ought to be adjusted to children, not children to the curriculum. It was increasingly recognized that since pupils of the same chronological age assigned to the same grade vary so in intellectual ability, standards for a particular age group ought to vary accordingly.

Grouping within the class on the basis of ability has become the prevalent practice, at least in the

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primary grades and at least for reading instruction. Some primary teachers report three reading groups and some, four. A few second- and third-grade teachers have two groups for arithmetic, although often temporarily. Still fewer have two groups for spelling.

There is a decrease in ability grouping in the intermediate grades. Two groups for reading replace the three or four at the primary level. By the seventh and eighth grades, grouping is the exception rather than the rule.

HOW DOES IT WORK?

How does mixed-ability grouping work? Unfortunately, studies in the area of classroom organization have been limited in scope. They have concentrated on only one aspect of the development of the child at a time—usually his achievement—and so a comprehensive evaluation is lacking.

We mention in passing the following observations: Mixed ability grouping works best when the philosophy of the entire school favors adjusting the program to the child, and when most of the pupils are able to achieve sufficient competency in reading by the end of grade 3. Teachers with a wide spread of ability in a classroom no longer appear reluctant to use easier-than-grade materials for slow learners, but are still reluctant to provide instruction and materials sufficiently advanced for fast learners. Teachers differ with respect to the number of groups they can comfortably manage. Ability groups within the classroom are most prevalent in the primary grades, gradually disappearing as children progress through the elementary grades, where more attention to individual differences actually is needed. And grouping pupils for instruction within the classroom means that pupils must spend considerable time working independently. All too often, this time is wasted in activities designed to keep children busy and quiet.

NONGRADED ORGANIZATION

Perhaps the most publicized and the fastest spreading of the newer approaches to organization is the nongraded elementary school. It has so far been largely confined to the primary unit.

The ungraded organization attempts to facilitate a plan for continuous growth during the child's beginning school years. It is designed to eliminate retardation in the primary grades by organizing the first three years according to reading levels. Each of these years is given a new name: beginning primary, intermediate primary, upper primary. Certain reading levels are assigned to each classroom and to each year of the primary. Within each classroom, the teacher groups for instruction according to the levels assigned to him. At the end of the school year, all pupils progress to another classroom. Most of the pupils complete the work of the primary unit in three years and are promoted to fourth grade.

About two percent take only two years and about the same number require four years, but each year they make continuous progress to the next highest level. The slowest learner may not even complete six levels (second reader) by the end of four years; however, he is sent to the fourth grade to avoid overage children in the elementary school.

To date, efforts to evaluate the ungraded organization plan again have been plagued by the fact that research has been limited to answering one question at a time, rather than to examining the impact on *all* aspects of child development.

It *has* been determined that teachers like the ungraded plan. But teachers have always hated to retard pupils. Under this plan teachers, parents, and pupils have three years rather than one to accept the fact that the pupil will take four years to do the work normally accomplished in three. It is argued that there is less damage to the selfconcept of the slow learner under such a plan than where pupils spend two years in the same grade.

While research is urgently needed on many problems of the ungraded plan of organization, there is evidence available now on a few points, such as:

The practice of putting enough faith in results of standardized tests at grade 1 level to justify their use for placement purposes is extremely questionable. Then, too, the nongraded plan has substituted level standards for grade standards. It is based on ability grouping. Like other organizational patterns based on ability grouping, the ungraded plan tends to penalize lower-class children who may be bright but not as verbal as their middle-class peers. The effect of errors of placement on the self-concept of children needs to be examined. Does a potentially bright child have an unrealistically low opinion of his ability as a result of being placed in a slower group?

Notable, also, is that the ungraded plan, widely advocated as a means of providing for individual differences, is largely confined to the primary years. Yet it is precisely the primary teacher who pays the most attention to individual differences and the intermediate teacher who pays the least. This writer would not advocate the extension of the plan into the intermediate years, but would, instead, argue for experimentation and research on more adequate techniques for meeting individual differences in older children.

DEPARTMENTALIZATION

Another method of organization that has been growing in response to increased emphasis on subject matter is the pattern of departmentalization. In the selfcontained classroom, the same teacher instructs in all academic subjects; with departmentalization, the pupils or teachers move from classroom to classroom. In recent years

more elementary schools have adopted this practice above the third grade.

There have been a number of arguments advanced against departmentalization in the elementary school, excluding the special subjects such as art, music, and physical education. Where one teacher has control of children for most of the day, more careful guidance of individual pupils is possible. A teacher in a departmentalized program may have more than 100 children to teach each day. It is difficult for him to have more than a cursory acquaintance with an individual child. Since the early years are the formative ones, it is important that a teacher have enough time each day with a pupil to know him and his problems thoroughly. It is also possible in the selfcontained classroom to make sure that concepts acquired in one subject are reinforced in others when opportunity and appropriate conditions are present.

While it is important that teachers know well the subject matter, the scope and depth of the elementary-school curriculum are not so great that classroom teachers cannot teach all major academic areas competently. While the goal of adequate preparation is far from realization, teacher-training programs are emphasizing more than ever a thorough grounding in the academic subjects.

DUAL-PROGRESS PLAN

It is common knowledge that pupils vary in their abilities. To provide for intra-individual variability, a dual-progress plan of organization is now being tried in selected eastern schools. The dual-progress plan divides the day for children above the third grade into two parts: graded and ungraded. Pupils spend the graded half of the day with a core teacher who teaches social studies and the language arts. The ungraded part of the day is spent with subject matter specialists. Assignment to the ungraded portion depends not on age or grade but on aptitudes, interests, and achievements. For example, a 10-year-old boy with special ability in arithmetic might spend the morning in a regular fifth-grade class. But half the afternoon might be spent with the same teacher in advanced arithmetic and science classes made up of nine-to-twelve-year-olds; the other half, in an advanced foreign-language class and perhaps a low-level music and art class.

The dual-progress plan has the distinct advantage of providing opportunities for able pupils to do advanced work in special fields, while at the same time insuring that they will have enough time with one teacher so that an individual is not lost in the shuffle of classes. Its shortcomings may be revealed and corrected as programs are evaluated. It may be that the third grade is too early to start such a plan; too many errors in assessing pupils' abilities may be made at this level. It will be interesting

to note, too, the impact of slow and fast learners on each other in the ungraded classes.

NO MAGIC FORMULA

In considering all these plans of organization, principals ought to beware of any interclass grouping plan as the too-simple solution to the complex problem of attending to individual differences. There is no magic formula, no giant computer, no administrative device that can section a grade of children so as to assure that every pupil will receive instruction suited to his educational level. Only good teachers can do this—only teachers who see pupils not as third graders, but as 30 children with varying capacities and needs. No administrative device can compensate for poor teaching.

With the present intense and needed emphasis on content in the elementary school, there is danger that, in the tradition of going to extremes, we will throw out what we know about the psychology of learning. In fact, even now phrases like "the whole child," "mental hygiene," and "acceptance of pupils" are being held up to ridicule by the hard-boiled who see the solution to all educational ills in the provision of a stimulating intellectual environment. Such an environment should be the fundamental right of every child, but it is not easy to predict the effects of a particular environment, stimulating though it may be, on a child. The "whole child" still comes to school, bringing with him his motivational structure.

FLEXIBILITY NEEDED

In order to provide an optimum instructional program, principals should facilitate an organization that will make use of the special abilities and training of individual teachers but without the compulsion to institutionalize such an organization. What is good for a particular fifth grade is not necessarily good for all grades, nor even for all fifth grades in a school system. The more flexible the organization of the elementary school, the more creatively teaching talent can be used. Creative administrators ought to conduct teacher inventories in order to ferret out special talents, and they ought to devise a plan to put that talent to use, without feeling that all schools in the system, regardless of their special needs, should adopt the same plan.

One of the great dangers facing the schools of the future is that of regimentation by administrative organization. Any of the plans discussed here might have some merit in a limited way. It is only when a blanket application is made that the defects are glaring.

Let us set up grouping procedures in the elementary schools so that there is plenty of room for teacher and pupils to move about; grouping procedures that will not view the child as "Upper Level Primary, Accelerated Group, Gifted," but as Jerry Jones, Human Being. •

Two Incorrect Assumptions on

Terminal Education

W. Linwood Chase

In Second Thoughts on Terminal Education

TERMINAL education is a problem of educational urgency. It demands attention because it needs exhaustive planning by educational authorities. It demands attention because parents must recognize its significance in the educational programs of their children. It demands attention because youth must understand the different paths available for job training and because there is a lack of sensitivity to the breadth of its characteristics and the importance of its objectives.

There are two frequently occurring incorrect assumptions concerning terminal education: one, all education of the individual ceases on a low rung of the ladder; two, classification in a group whose formal education is smaller in amount than others means being not quite respectable.

These assumptions are incorrect because education does not cease on leaving a formal school organization; and, of course, life can be successful and command the highest respect even if one does not go to college.

Organized education may be over for the school-leaver at any point before attainment of the baccalaureate degree. Presumably, any type of education in which the planned program falls short of a four-year college degree is apt to be considered as terminal education.

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A young man I know completed high school doing well in those subjects he liked and barely getting by in those he did not like. Carrying the same attitudes into college, he ended his freshman year on probation. He did not return to college. He enlisted in the Air Corps. The wise father of this boy later wrote to his son on his after-service plans: "I don't know what kind of work you have decided to do when you come out of the service, but I hope, whatever it is, you will take a school program to prepare you for it, whether that program is six months, or a year, or longer."

This father was talking about terminal education—a formal education program which prepares a young man for a job. He realized that a four-year college is not the only program of education beyond the high school. There are schools which provide terminal education

programs ranging from instruction in barbering to certain skills needed in the electronics industry, or from many other kinds of specialized skills, to liberal arts or business education in the junior college.

That one-third to one-half of those who enter high school do not graduate indicates how far we are falling short of the American dream of a secondary-school education for all youth. Those who do not graduate extend through the whole range of mental ability, from low to high.

Those who leave the high school early can hardly expect that the high school has served as a terminal education agency. It has not been given the opportunity. High-school education can be considered a package deal. You have to take the whole package if you expect to get much benefit from it. On the other hand, the high school must frequently examine the contents of the package to see that the ingredients are what is required by the individual.

What *is* required? The fundamental purpose of a high school is to provide educational opportunities for every student able to benefit by them. The importance of developing attitudes, understandings, and skills common to all citizens of our democracy has long been recognized. The trend is to make secondary-school education function more efficiently in these phases of learning. It must continue that way. One cannot say that all school-leavers quit school because the school fails to provide for their needs. One can say that a smaller number would quit school if there had been more concern for their needs.

Any discussion of meeting the needs of individuals must include a consideration of the needs of the society in which they live. Therefore, schools must have goals in citizenship education and yet must so handle the needs of the individual that he does not quit school. Although he may not always realize it, the individual's needs aren't served unless he develops the general qualifications to be successful as a worker in the world when school days are over.

Speaking at a conference on secondary education, Mr. Kennerly Woody of the New York Telephone Company, classified business jobs into three groups: There are craft jobs such as stenographers, bookkeepers, lathe operators, and people who work on electrical assemblies; there are technical jobs for those who do the research and planning—the skilled engineers, the experts on design, the specialists; and a third group consisting of administrators who chart the course of business and see that its affairs are conducted wisely and well.

High-school graduates can work effectively in the craft jobs. If they have ability and drive, they can progress to higher level positions and opportunities. In these craft jobs they can be happy and can raise happy families.

It is the ambitious parents who

sometimes attempt to force their children into higher education beyond their capacities and their interests. High-school principals and guidance counselors constantly report the unwillingness of some parents to recognize that their children are not four-year college material. Parents sometimes choose schools not on the basis of their children's abilities and aptitudes, but rather of the school's social prestige. Principals and guidance counselors are in a position to give helpful advice about a desirable terminal education program for high-school students. Quite frequently, they are in a better position to give such advice, for they are more objective and less emotional than are the parents.

Terminal education, which for any individual may be determined by desire, interest, or circumstances, should have within it that spark which starts the fire of self-direction in education beyond the high school. It is this spark that will make better citizens and better workers. •

Continuing Education and Guidance

ONCE a young person has left school, no one is officially concerned with his educational or vocational future. It is not usually regarded as a responsibility of the school. But it should be. We should not simply turn these boys and girls out on the streets. They need advice . . . They need to be helped to think constructively about their own abilities and limitations, about job opportunities and about their further learning and growth . . . The young people who go out into the world after high school—and even more urgently, those who drop out before graduation from high school—should be helped in order to assure that the years immediately ahead will be years of continued self-development.

To be specific, every high school in the land should provide *continuing* vocational and educational counseling for all who leave school short of college. These services should be available until the boy or girl reaches the age of 21 . . .

It may be objected that such a service would be expensive. It would be an added expense to the schools, but not necessarily to society as a whole. Young people who fail to get jobs or who become juvenile delinquents are a costly burden on the whole community; and every boy or girl whose abilities are not developed is a loss to society. It is better to spend money preventing such outcomes than to spend it later picking up the pieces.—*John W. Gardner*, president of Carnegie Corporation of New York.

Adult Pressure

Can Injure Growth

The Dangers of Social Adjustment

ROBERT W. WHITE

In Teachers College Record

ABOUT 10 years ago, a certain child-guidance clinic hired an efficiency expert to devise ways of saving staff time. After studying one hundred printed forms used for case records, the expert prepared a new form and offered it for comments at a staff conference. Immediately there was a chorus of expostulation. After the heading, "Patient's Mother," the following sentence was set in type:

"The mother, outwardly nervous and over-protective, was inwardly a cold, rejective person."

"It was in every one of the records," the expert declared. "Every one! And it will save 9.3 staff hours a year if you don't have to write it each time."

Another chorus of protest rose at another place on the form. Under the heading, "Recommendations," the expert had caused to be printed: "The child should be made to have frequent social contacts with other children in order to achieve social adjustment."

This was 10 years ago. Is it the same today? Would the efficiency expert find the same stereotypes, the same regnant images of maternal rejection and social isolation? Not entirely, for excesses in one direction tend to breed reactions in the opposite direction.

Since 1950, a number of professional voices have been raised in behalf of the clinical mother. She is no longer the automatic scapegoat for whatever is wrong with the child. During the same period there have been clear sounds of misgivings about social participation.

It is the second point that provides our theme. What dangers lie in heavy repeated doses of social participation? Is there a risk of harmful side effects in the attempt to produce social adjustment?

Professional workers may have had second thoughts about social participation, but it takes time to undo the effects of a doctrine that has been proclaimed as scientific truth. The earlier teaching has intimidated mothers and teachers, leading them to take anxious steps

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designed to ensure participation, steps which may have just about the opposite of the intended effect. Can we expect a parent who is anxious about his child's social adjustment to produce anything but an anxious social adjustment in the child?

The ideal of social adjustment is in the broadest sense an educational ideal. All ideals of this kind become subject to misuse. With regard to social adjustment, we are perhaps in a stage that has often been occupied and then outgrown by earlier educational ideals. It is the stage of being overcommitted to one goal, of being nervous about achieving it, of feeling sure that the child will never develop properly unless we force him to behave as he should.

WHY THE ANXIETY?

There can be little doubt that anxieties about social adjustment are widespread. Why these anxieties? Why did it happen that, particularly during the forties and fifties, social skill and enjoyment emerged supreme virtues that must be inculcated at all costs? This result was produced by a convergence of several influences.

We have become aware of profound changes in our economic and social system. As industry assumes more and more the pattern of a large organization, and the small independent business unit ceases to be typical, success and advancement come to depend heavily on qualities of a social sort.

In short, we live in a time when economic success can less and less be distinguished from social success. How can one's offspring get on in the world if he plays by himself, if he does not start right away to develop a marketable personality and to win top grades as an "organization child"?

We also live in a time when we have learned to perceive human relations as the crux of some of our most serious problems. Social experience on the part of children is seen by many parents and teachers as a crucial step on the way to enlightened attitudes toward problems of class, race, and national rivalries.

It is clear, then, that strong social forces have accented the value we attach to becoming a social person. It is no wonder that we became obsessed about social adjustment. I think we greatly exaggerated its significance, but I do not mean by this to challenge its importance.

Our problem, then, cannot be solved by denying that social interaction is a good thing for children. But we do need to calm our anxiety on the subject so we can stop pushing and harassing our children and thus spoiling the natural growth of their social interests.

What does one want to have happen in a child under the heading of social growth? We should not be content with the growth of mere social skills and techniques, with the ability to chatter at a tea, smile cordially at a cocktail party,

and issue appropriate flattery when entertaining an important person. The various forms of social competence should not be confused with the more profound goals of social growth.

What we really want is that children should become interested in each other. We want them to enjoy being with others, to take pleasure in companionship. And we want them to appreciate the happiness that comes from sharing activities with other members of a group.

Our goal, then, is the fullest possible development of the child's social interest. We must not fail to recognize the obstacles to such growth. Children have aggressive feelings, too, and they are subject to anxiety. If their contacts provoke aggressiveness and fear, there will be little chance for friendly interest and affection to achieve natural growth. These are the liabilities, and we must bear them in mind as we consider what is possible for adults to do to encourage social growth.

RESULTS OF PRESSURE

Consider first what is likely to happen as a consequence of adult pressure. When we push children into social situations without waiting for the help of their own spontaneous urges, we seriously stack the cards against their having a happy experience. We evoke their general dislike of being pushed; we are likely to push them into groups where aggression is not under control; and we override whatever anxieties they may experience.

The net result is a massive invitation to develop defenses against social participation. The child learns to be present in body but not in spirit, just as he did in the old-fashioned disciplinary school. In short, adult pressure is all too likely to teach the child to become a lonely member of a lonely crowd.

Another likely consequence of pressure is a disregard for the natural rate of social growth. Social virtuosity is expected from the start. But social growth is a slow process involving both maturation and cumulative learning. As development goes forward, a significant function of the child's social life is to provide an alternative society to that of his home, a foil against his parents, a means of developing independence and selfrespect. The last thing children want is for the parents to be enthusiastic about a friendship and to suggest ways of increasing the contacts.

SOCIAL GROWTH

It is worth remembering that social growth does not take place exclusively in social situations; much of it occurs necessarily in imagination. Our panic about autism has caused us to overlook the forward-looking, planful, realistic qualities that are so abundantly present in imaginative play. We tend to think that fantasy will be merely wish-fulfilling, not fitting a person for contact with reality. But this is not what we find when we

make any study of fantasy. We find the child imagining things he would like to do, which very probably he will do a little later, and we find him quite capable of telling the difference between a probable and improbable fantasy. Most accomplishments occur first in fantasy; the child's social accomplishments are not an exception to this rule.

Another sphere of social growth is reading. It would be a valuable exercise for all of us if we could remember the origins of our best social insights, our best pieces of social learning, and then see how many of them came from books and how many from social interactions. I think the books would not come off too badly, for many of them are about social realities and vital social relationships even when cast in the form of fiction. Our real social experience, especially the amount we have had by the time of our early twenties, might leave us quite provincial in outlook and quite limited as to depth if we could not amplify it by the social experience of the race, vivified for us in good literature. We must beware of measuring social growth by an external yardstick.

Finally, we ought to recognize that social growth is promoted by having strong interests, not necessarily social in character, which can be shared with those similarly interested. Common interest gives substance to relationships, something to share beside pleasant smiles; it gives those flashes of mutual appreciation which form the real high spots of social growth.

If we are committed to the proposition that the growth of social interest is what we really want, then we are equally committed to the goal of having people be as interesting as possible. I believe we often do more to enrich social living by encouraging children to develop the kinds of interests that must first grow in solitude than by urging them to diffuse their energies through a multitude of social contacts. No one is better fitted than an interesting person to awaken social interest.

I believe it is time to forget the pat formula of social adjustment with which we have been obsessed. It is time to realize that economic and social trends and psychiatric insights have intimidated us and robbed us of common sense about social growth.

There is great natural strength in the child's urge to find opportunities for friendly and rewarding human relations. Unless social development goes very badly, we can have faith that the child's urge will prevail in its own way and at its own time. We can be most helpful if we do not jump in and spoil the process by trying to hasten it and seizing the initiative from the child. In an age when so much rapid and dramatic engineering is done, it is hard to be a husbandman who waits for things to grow. But social growth cannot be engineered. It can happen only through growth. •

1961

Pass or Fail in the Elementary Schools

A Study of Promotion Policy

STUART E. DEAN

In The Elementary School Journal

AMONG the many criticisms leveled at the elementary school today is the charge that it is devoid of intellectual standards for children; that it operates without the conviction that pupils should show evidence of academic progress; and that it has drifted into a soft pedagogy that allows youngsters to move along from grade to grade on the basis of a nebulous doctrine of social promotion.

The whole problem of promoting pupils from one grade to another calls for a look at the graded type of elementary-school organization. We have long had a series of levels known and accepted as grades. The rationale for grades as well as their origin is clear if we recall that they were once considered essential administrative machinery.

Lately, however, many educators have come to entertain doubts about grades, and they find that their suspicions are supported by a growing body of knowledge about children and how they learn. Some educators have predicted that we may soon be moving into an era in which we realize that the structural pattern of a school exists to serve children. In time, these educators say, we may eventually depart from practices that have made children the victims of administrative expediency. Increasingly, some school administrators and teachers are coming to believe that restrictions imposed by a graded system have been harmful and that steps must be taken to remove imposed barriers or grades.

However, as long as the graded system exists in its present form, official recognition of pupil progress takes the form of advancement from one grade to another. To apply this type of procedure, certain policies and judgments have been formulated. Some critics are suggesting that these policies have been evolved without full consideration of the intellectual responsibilities of the school.

What are current practices in pupil promotion in our elementary schools? Are the critics right? Are we shutting our eyes to standards? Do children move from grade to grade simply on the basis of ethereal dogmas? Are we shortchanging our youngsters educationally?

To answer these questions—and many others—the U. S. Office of Education recently made a survey

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of practices, policies, and trends in the administration of public elementary schools.

The Office of Education undertook this research for two purposes: first, to provide current information that local communities could use in the solution of their school problems; and second, to provide information for the improvement of preservice and in-service programs in the preparation of elementary-school principals.

What picture does the survey present of pupil-promotional policies in the elementary schools? In general, practices reported fall into two broad categories: promotion based entirely on academic progress and promotion that entirely ignores academic progress. In the study, the term *group progress* was adopted to describe the latter approach, although the term *social promotion* is commonly used.

Results of the survey revealed that promotion on the basis of academic factors is the preponderant national pattern. Only a small segment of our schools reported that their promotion practices were based on the so-called social factor. Actually, about 70 percent of the urban places reported that promotion was based on academic consideration, while less than 12 percent reported group progress as a basis for promotion.

The study was designed to permit analyses by region as well as by population group. The results show that all population groups and all regions, with the exception of the largest cities, reflect the preponderant national pattern of promotion policies based on academic progress. In other words, this policy is almost standard throughout the country, irrespective of the size of urban place or the geographic location.

For the nation as a whole, only 11.7 percent of urban places indicated that group progress is the basis for elementary-school pupil promotion (10.8 percent primarily and 0.9 percent exclusively). With less than 1 percent of the urban places reporting that the "social promotion" principle was the *decisive* factor, it seems that the evidence established by the survey seriously challenges the charge that public elementary schools are unmindful of academic responsibilities in the promotion of pupils. •

FAILING a student is only justified as a means to improved learning for the student. The decision should be made only under a guidance-promotion policy, with all facts about the individual thoroughly appraised. To one child, failure might be damaging; to another child, it might be a challenge. The decision to fail a child becomes a major professional responsibility akin to the decision of a surgeon to perform an operation.—*Stanley E. Dimond*, University of Michigan.

Four Emerging Trends

New Developments in Secondary-School Science

MARGARET J. MCKIBBEN

In The Bulletin of the National Association of Secondary School Principals

THE time is right for change in our high-school science programs. And change there is today—more than that brought about by two world wars or a depression. It is important to know that a change is in order. It is perhaps more important to know *what* change.

In spite of the large number of "crash" programs, many of the recent developments are the result of carefully considered youth-school-community studies. A recent study of these developments reveals four emerging trends.

1. An increase in ability grouping.

2. Programs being extended outside normal school hours through evening, Saturday, and summer programs.

3. Greater use of nonschool personnel and facilities for teaching purposes.

4. An academic strengthening and modernizing of high-school science courses.

In the matter of homogeneous grouping, three- and even five-track programs are not uncommon. In one of the common three-track patterns, seventh-grade general science is not divided into low and high groups. In the eighth grade, however, students of above average ability (Track I) complete much of eighth- and ninth-grade general science in one year; they are then ready for biology in the ninth grade. Track II ninth-grade general science may differ from Track III general science in study units of greater depth and in having more individual and group laboratory work.

Students in Track I then complete chemistry in the tenth grade, physics in the eleventh grade, and are free to take an advanced course in the twelfth grade. Track II students may enrol for biology in the tenth grade, followed in the eleventh by regular or applied chemistry or physics or physical science. Track III students, lacking the ability to profit greatly from academic science courses, will probably take a physical science

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course in the eleventh or twelfth grade to complete their science training.

Homogeneous grouping places a burden of student identification on school administrators, guidance personnel, science supervisors, and curriculum specialists as well as science teachers. Differentiated programs must be scheduled, students tested and interviewed, and records kept. But results of learning studies are in favor of grouping, and most of those concerned with such programs agree that the results obtained are worth the effort.

EXTENDING THE SCHOOL DAY

The practice of extending the school day beyond normal school hours is becoming increasingly popular to multiply the effect of the science program. Many, though not all, of the extended programs, are for those of greater than average ability and motivation in science. Some emphasize field trips; some emphasize projects, visiting lecturers, or some other type of activity. Some provide credit toward graduation, while others are noncredit courses.

The summer programs in science most frequently are for senior-high-school students and the methods of operating the programs vary greatly. One large city system established a summer science program for all public, private, and parochial school students, grades 7-12. Three centers were established and 180 students were selected. Three teachers and 60 students were assigned to each center and divided into biology, chemistry, and physics sections.

Three types of activities were included in the program: projects, seminars, and field trips. Some of the projects were carried on under the supervision of university and industrial scientists. In many cases, students entered the program with projects already underway. Others came with little more than a general interest in science and a keen desire to know more about all aspects of it. The function of the faculties at the centers was to provide specific help in completing the projects and in developing interest in some specific area for those with only a general interest.

Another example is a summer mathematics-science program for students in the eleventh and twelfth grades which provided students with an opportunity to have work-experience in industry, to undertake a mathematics-science project of considerable difficulty, to use university library facilities, and to receive additional training in areas commonly found in scholarship testing.

In some schools, a shorter summer period may be used to prepare students for advanced science courses. In one program, eighth-grade students selected for ninth-grade biology were given a two-weeks preparatory course in basic biology, chemistry, and physics. In another, a summer physical-science program covering ninth-grade general science is given to those who

will be accelerated in ninth-grade biology.

The extended programs taking place on Saturdays or before and after school also are conducted in a variety of ways. One well-established Saturday science program has 50 boys and girls, grades 8-12 enrolled. Sessions are informal—usually a lecture with films, slides, or demonstrations. Taking advantage of the nearby ocean and several marine laboratories, the program is slanted toward biology.

Another Saturday program, which is a voluntary one for students, is held Saturday mornings, one Saturday a month for 10 months. Students attend because of their interest in supplementing the regular high-school science programs and do not receive academic credit. The first part of each period is devoted to lectures by college and university staff members; the second portion to student laboratory experimentation.

Extending the school day to before-school or after-school hours involves administrative difficulties. Schedules for both teachers and students must be adjusted, teachers must be compensated, and there are other complications. Nevertheless, there are schools operating programs from 7:00 to 7:50 in the mornings, or from 3:30 to 5:30 in the afternoons. Such programming does make for better use of existing school facilities and does tend to strengthen the science curriculum.

Another striking development in high-school science instruction is the increased number of schools making use of nonschool personnel and facilities. Several patterns have been followed.

NONSCHOOL PERSONNEL USE

In one community, a council of representatives of professional and technical societies and the local board of education was founded. This organization developed a school-consultant service, a career-night program, a science fair, a newsletter to keep teachers informed of science activities of interest to them, and visual aids for classroom use.

The consultant service provides each high school with the services of two scientists. The consultants cooperate with school personnel in such ways as developing a list of science scholarships, planning plant tours, screening and distributing career-guidance booklets, evaluating and purchasing films for school use, and arranging for speakers.

The career-night programs usually take the form of a panel of speakers describing requirements and opportunities in engineering and scientific fields. The annual science fair for students in grades 7-12 at a local state teachers college is sponsored jointly by the local science teachers association and the council. It provides technical information for those judging and viewing the exhibits and science tours for award winners.

Other methods of making use of nonschool personnel include

resource committees drawn from college and university science departments who assist in career guidance, advise about laboratory projects, assist in securing unusual scientific equipment, and provide special lectures.

Summer research-employment opportunities for students provide another means for expanding high-school science programs. The number of government, industry, and university laboratories offering such opportunities is increasing.

The developments in course content in the newer secondary-science courses have been receiving much publicity recently. The newer course content differs from that of the traditional courses in three general respects: It is more difficult at all ability levels, there is greater emphasis on the quantitative aspects of science, and more modern material is being included.

To portray some of the developments in content in the various study areas of science, one may examine the trends observable just in the new chemistry courses. As with the other subjects, there is a new interest in depth. To allow for this, some traditional chemistry units have been eliminated or greatly reduced. This is true of much of the descriptive material about the sulfur, phosphorus, and nitrogen compounds.

To provide more class and laboratory time for this new depth approach, more hours per week are being scheduled for chemistry and the number of semesters may be increased from two to three or four.

An increased dependence on higher mathematics is a natural result of stressing the quantitative rather than the qualitative aspects of chemistry. Three years of mathematics is a common prerequisite. Mathematics requirements may include college algebra or calculus.

There is a movement from the "cookbook" type of laboratory procedures to an "open-ended" type of activity. Experiments do not present a step-by-step procedure. They define a problem, list materials needed for its solution, and require the student to plan and conduct the procedures needed for solution. Chemistry teachers are at work developing their own unstructured laboratory experiments as well as making use of those prepared.

In earth science courses, in biology courses, in physics courses, and in physical science courses, the content is also being revised today.

The development of science programs at the junior-high level is not as well defined as it is at the senior-high level. A majority of systems are evidently undecided about their science programs at the junior-high-school level. In addition, there has not been the concentration of effort in research and planning comparable to that focused at the senior-high-school science program. Nevertheless, the influence of the senior-high-school science programs is being felt and there is an upgrading of junior-high-school science in many schools. •

There Is a Natural Hierarchy of Questions

Questioning Science

THOMAS H. BRIGGS

In The Educational Forum

A WOMAN, proud of her academic schooling, was once twitted by a friend for her ignorance about science. When he said, "I doubt if you know how we get light in this room," she indignantly replied, "Of course I do. I just press a button on the wall." Her schooling had not caused that stimulant to education, a lively inquiring mind. Such a mind persists to know such things as why a series of pictures flashed on a screen can give a visual continuum, why a rocket shot into space goes into orbit instead of falling back to earth, and even how a pin-spotter works in a bowling alley.

Knowledge about these phenomenons may not be important from a practical point of view. But the practical, that which one can use for convenience or physical comfort, is far from being the only value in life. Relief from the embarrassment of ignorance, the satisfaction of understanding, the glow of intellectual curiosity which, through growing by being satisfied, is never satiated, the comfort of being at home in one's environment—all such things enlarge the world and enrich our lives.

Everyone is interested in science of some sort and to some degree, and teachers have a challenge to find these interests and both to direct and develop them. Interest is expressed as curiosity leading to questions, usually addressed to others by those who have not learned the high satisfaction of finding answers for themselves. By nature, man is uncomfortable when confronted by something that he does not understand or when in the company of those who know what he does not know. Recognizing this discomfort, teachers of science have an opportunity to show how it can be relieved by learning.

Curiosity is usually manifested by questions; the number and kind of questions are a good indication of mental alertness and a desire to know. Infants are so full of questions that they frequently pester parents, especially when no satisfactory answers are ready. It is by questioning that they learn. Rebuffs and ridicule lessen the ques-

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Thomas H. Briggs was for many years a Professor of Secondary Education at Teachers College, Columbia University, New York. Reported from The Educational Forum, *XXV (January 1961), 153–59.*

tioning, and perhaps that is why as the child grows older he voices fewer of the questions that arise in his mind.

A class that does not question is not being well educated. Students who ask no questions and do not persist to get satisfying answers seldom develop an independent intellectual life. They deprive themselves of the thrill of discovering for themselves, and they fail to learn how, outside the school, to find or to accept challenges, to evaluate them, to invent and test hypotheses, and to know when they have a satisfying solution.

And so we come to a realization of the importance, especially in science teaching, of recognizing questions that students raise. Not only that, but also the necessity, if young people are to become really educated, of encouraging them to raise questions when they are obstructed by ignorance on the road to an objective.

WHAT QUESTIONS?

What are natural questions when one is confronted by unusual phenomenons of nature or mechanics? For a number of years I have tried, by informal investigation, to find out. Confronting acquaintances, both young and adult, with some unusual gadget or showing them some unnoticed bit of nature, saying nothing, I waited for spontaneous questions.

Illustrative of the gadgets that I have used are a circular slide rule, a miniature light meter, a cigarette lighter activated by a metal of the platinum family being inserted into a wick saturated with methanol, and a tobacco pouch closing with a zipper, when that was a novelty. For natural phenomenons I showed the curious roots of an Indian pipe, that the circular strands of a spider's web are sticky while the orbital ones are not, pointed to varves formed in a glacial lake, and the like.

If I was asked, "Why are you showing me this?" or "Where did you find it?" of course there was no manifestation of interest. A simple answer to such a question gives complete satisfaction to a sluggish curiosity.

A more lively curiosity leads to a second type of question: "What is that for?" or "How did it come about?" Such questions invite a leading on, not by simple answers but, rather, by questions that stimulate independent thinking. Such questions suggest more careful observations, perhaps directed by questions or of readings carefully selected, with passages that are sure to be interesting for bait, or some simple experiment, like testing the intelligence of chipmunks by placing food in a variety of places. When curiosity, however slight, is manifested, a teacher faces a challenge to develop it so that it leads to something of educational value, whether practical or stimulating to the growth of an inquiring mind.

A third natural question, evidencing interest and manifesting

the human instinct to relate everything to himself is "Can I work it?" or "Can I explain it?" Psychologists tell us that everybody likes to be a cause. Nobody can watch another trying to untie a knot without his fingers itching to do the job himself. This natural desire can be used to increase curiosity, for we are all more interested in what we have had some part, however slight, in causing.

These three types of natural questions may irritate a teacher whose mind is on things seemingly to him more important. But they cannot be safely ignored, for they evince incipient interests that can be developed. It is easier to increase the speed of a moving object than to get momentum from a dead start.

A fourth question, less frequently asked, was "What principle explains this?" or "What explanation is there for this phenomenon?" Such questions evince not only some maturity of intellect but also a readiness to be directed to important learning. When such questions are educed, some teacher has probably been patient in answering questions of less significance, and now there is a student who challenges a teacher's best skill to develop a scientist or one who appreciates the wonders of science as a part of his liberal education.

A fifth and final type of question, rarely heard, was "What new application of this principle is possible?" This question arises in the minds of geniuses who have the gift of invention. Benjamin Franklin had this gift. He applied the principle and invented the lightning rod. The gyroscope was at first merely an intriguing toy, but geniuses have found many important uses for it. The bouncing putty invented by Coolidge, however, still waits for some genius to find a use for it.

It would be marvelous if there were more geniuses who could apply principles and laws to enrich the world by useful invention. But such geniuses are rare. They are born with peculiar gifts which it is doubtful if education of any kind can create. Education can, however, develop curiosities that lead to accumulation of knowledge that makes invention possible.

What, then, should our schools recognize as a prime responsibility in the teaching of science? First, they should recognize that there is a natural hierarchy of questions that people ask about phenomenons, a hierarchy along which the immature should be helped to move upward. Respecting those that are spontaneous and simple, a teacher should recognize that these are the first steps along the road that he wishes students to progress. To insure that those more important questions will be raised, patience is required in giving answers to questions that rise from immature groping out of the gloom of ignorance. Respect for any sincere question makes it easier for others to be asked. And questioning leads to learning that is meaningful. •

Arithmetic Concepts Possessed by the Preschool Child

CORWIN E. BJONERUD

In The Arithmetic Teacher

THE first half of the twentieth century has seen many studies to determine the most desirable time to start a planned sequential instructional arithmetic program for the young child. Findings have been presented that vary from initial instruction starting in the first grade, to a recommendation that beginning formalized instruction be delayed until the seventh grade. In general, however, these studies indicate that the child benefits when systematic instruction starts during his first-grade experiences.

It is interesting to note that previous studies of arithmetic and the young child were carried out after the child was well into or past his kindergarten year of public school. While formalized instruction in arithmetic is rarely started in kindergarten, an informal program of elementary number concepts is commonly taught. This leaves many unanswered questions regarding the extent of number knowledges and skills possessed by the preschool child.

In an attempt to discover something about the arithmetic concepts possessed by the preschool child, a study was made of 100 beginning kindergarten children in the Livonia, Michigan, public schools in 1957. The study was repeated again in February 1960, with 27 pupils, all beginning kindergarten children, in the demonstration school on the campus of San Francisco State College, California. The children in the demonstration school are not a select group. They are all children of the same age residing in an assigned attendance area determined by the San Francisco Unified School District.

Corwin E. Bjonerud is a member of the faculty at San Francisco State College, California. *Reported from* The Arithmetic Teacher, *VII (November 1960), 347–50.*

The purpose of the study was to discover some of the specific number concepts possessed by the preschool child. In no way has the study been conducted to permit interpretation as an inventory of a child's readiness for formal instruction in arithmetic. Instead, it is hoped that the findings may bring about a closer scrutiny of what is generally accepted by teachers as normal number knowledge at the beginning of the kindergarten year, with the result that the planned in-

struction may be based realistically on the knowledges and needs of the five-year-old.

Two tests were developed to aid in securing the needed data. The first was an individual oral interview to test number knowledges.

The second test was a written picture-test containing arithmetical concepts that could be presented clearly in picture form. Considerable effort was made to see that each item and picture were ones familiar to five-year-olds.

In generalizing the findings, both groups will be treated as one. There was striking similarity in the data secured from both groups.

COUNTING

Considerable variance in ability to do rote counting by *one* was evidenced, but every child displayed some facility in this number knowledge. The mean for the entire group was approximately 19, while five children were able to count to 100 or higher.

Approximately 25 percent of the children exhibited some ability to do rote counting by 10, a few were able to reach 100. Some individual comments were made during this portion of the test. One was, "I thought there was only one way to count!" while another child promptly counted to sixty by fives.

There was a marked similarity between the ability to do rational counting by one and rote counting by one. The mean for the entire group was about 19. For some, as the higher numbers were reached, there was slight confusion of one-to-one correspondence. A few counted in blocks of sequence, jumping several decades and continuing without error.

Few children displayed an understanding of number sequences other than the sequence of numbers by one. Less than 10 percent understood a sequence of odd numbers, but approximately 20 percent succeeded with a sequence of even numbers less than 10.

Results of the items concerned with ordinal numbers showed that more than half of the children had some understanding of this concept. Approximately 95 percent understood the ordinal number *first*, while slightly more than 70 percent knew *middle* and *last*. At least 50 percent displayed a knowledge of the ordinal numbers *second* and *fourth*.

These beginning kindergarten children possessed considerable understanding of number selection skills and were able to recognize a quantity of items numbering less than four immediately. Some were able to recognize more than four items, but less than nine. All of the children were able to select quantities of three or less.

It was evident that many beginning kindergarten children possess a high degree of understanding of terms describing premeasurement concepts and are able to recognize several common instruments used in measurement.

When requested to name the measuring instrument to perform

a specific job, 89 percent were able to name the clock and 51 percent could name the calendar. Approximately one-third were able to name accurately the yardstick, foot rule, scale, and thermometer.

There was little verbal response or interest shown when a collection of coins and a dollar bill was displayed. When asked what they could or would do with the money, little enthusiasm was evoked, with responses almost entirely limited to the idea that it was something to play with or to put in one's bank. No particular pattern developed in the knowledge displayed according to the coin's value. Eighty percent of the children immediately recognized the penny, but only 38 percent recognized the nickel.

The study revealed information about the children's abilities in several other areas. It appears that the majority of preschool children possess the ability to recognize the geometric figures of the circle and the square. A high percentage responded correctly to the pictured illustrations. There was also a high degree of skill evidenced in solving word problems that involve simple addition and subtraction facts. Almost 90 percent of the children solved addition combinations, while approximately 75 percent accurately solved subtraction combinations.

What are some of the educational implications to be drawn from the responses of these 127 beginning kindergarten children? Certainly some thought should be given to possible adjustments in the presentation of arithmetical concepts in the kindergarten and the first grade. Specifically these might include:

1. A planned arithmetic-readiness program presented at the kindergarten level. This would require a systematic presentation to replace the incidental approach that is now generally employed. It appears that this instruction could begin no later than the second semester of the kindergarten year.

2. A program of arithmetic in the first grade that would reflect the readiness period carried out in the kindergarten. The readiness program would be considerably shorter at the first-grade level for most children, but could be extended for whatever period necessary for each child before the concepts developed in the usual first-grade program are presented. This program would allow more time in the first grade for a broadened experience in arithmetic for most children.

3. An inventory of the child's number concepts should be made during the first part of the kindergarten year so that more emphasis in both the kindergarten and the first grade can be placed on developing number understandings for those children whose background experiences are limited. This would appear to be a reasonable approach, inasmuch as the data seem to indicate that the ability of beginning kindergarten children to understand many basic arithmetical concepts is a reality. •

What Would You Do?

Sociodrama as a Teaching Technique

GRACE GRAHAM
In The Social Studies

JOHN JONES, a west-coast college student, applied for a teaching position in a small eastern city. After submitting his recommendations and exchanging several letters with the superintendent of schools, he was given a contract which he signed.

John and Mary, his wife, bought a trailer. They made a leisurely trip across the United States arriving at their destination a week before the opening of school. The next morning John visited Mr. Brown, the superintendent.

Mr. Brown was very upset when he saw John Jones. "You did not tell me you are a Negro," he said. "We have never had a Negro on our faculty and the community would not stand for it. I don't know what we can do about you. I'll call a meeting of the school board to discuss the matter. But I can assure you, Mr. Jones, you will not be allowed to teach here."

John Jones went home to tell his wife the bad news and to discuss with her what they should do.

This story is ideal for the implementation of sociodrama as a teaching method. After telling the story, the teacher would tell her class:

"Now we shall act out possible solutions that John and Mary might find to their problem. Tim, you play the role of John, and Jane, you will be Mary. Remember, you decide what you are going to do and also how you think the person whose part you are playing will *feel* and talk."

Grace Graham is a member of the faculty at the University of Oregon, Eugene. Reported from The Social Studies, *LI (December 1960), 257–59.*

The teacher then chooses one or two other casts and sends the couples out of the classroom to discuss the problem. While they are out, the rest of the class quickly lists various possible solutions, such as: sue in court for a year's salary; plead with the board for a chance, agreeing that John will leave after a trial period if he does not make good; appeal to the National Association for the Advancement of Colored People for help; get another job in the vicinity; settle for compensation for time and expenses of the trip; or get a job in a Negro school.

The casts return and *extemporaneously* discuss the problem. Often the role players and the class hit on the same solutions. Sometimes the players act out an entirely different ending. The feeling that each pair puts into the dramatiza-

tion varies from belligerency to dejection on the part of one or the other of the characters.

Following the role-playing, the class analyzes the solutions and the feelings portrayed in terms of reasoning, psychological authenticity, and possible consequences of alternate courses.

The setting of the John Jones story is present-day America, but any problem involving human relationships — current or historical — can be studied through sociodrama.

The advantage of sociodrama over the usual class discussion is that frequently the players, and sometimes the class, identify with the roles being portrayed. In studying current affairs, their social sensitivities are developed because they learn how it feels to be in someone else's shoes. Identification with the aspirations, disappointments, troubles, and fears of others is especially important today when so much of our society is living in tight little subcultures of suburbia.

While stories for role-playing may come from today's headlines, they may be as old as recorded history. For example, the dilemma of Tom Smithson, a Northern States-Righter at the time of the Civil War, might be emphasized through sociodrama. People who lived long ago come alive, problems seem real, and social history becomes more significant. This adds another dimension to good teaching of history: the concept of social change.

Although problems of human relationships are as old as man, the solutions chosen by persons long dead might have been different had they known what we know today. Consequently, pupils must orient their thinking to that of the period being studied. Part of the evaluation of the sociodrama should entail the historical accuracy of the data cited. At the same time, children should be reminded that some of the choices we make today might be unwise from the vantage point of 2500 A. D.

PLANNING AND PROCEDURES

The following paragraphs present an outline of planning and procedures for effective use of sociodrama in the classroom.

Planning: Select a problem of human relationships that fits the maturity level of your pupils. You may find a short story that serves the purpose, you may write your own story, or you may simply describe the characters and the situations in which they are involved to the class. In any event, the number of characters should be limited, the ending should not be suggested, and several different endings should be possible.

Procedures: Prepare the pupils to identify with the characters by explaining that you will choose some of them to act out the ending of the story you are about to tell or read. Then read or tell the story.

Choose the cast. (At first, it may be helpful to choose the actors before telling story.) To assure suc-

cess with the first sociodrama, choose pupils who will cooperate willingly and will talk readily. After gaining experience, choose children who will gain from playing the role. For example, a boy who has no sympathy for labor unions may be cast in the role of a labor leader. The assumption is that he would learn something of labor's point of view.

Send the actors out of the room for a three to five minute planning session.

Let the class suggest solutions. This can be omitted but it is useful in involving the entire class. At first, this time might be spent in helping the class think through how they will evaluate the role-playing.

Students act out the conclusion of the story. The teacher should sit with the class and not interrupt unless the players are obviously changing the facts of the situation. The teacher should recognize when a decision has been reached, end the scene, and thank the performers. Sometimes the pupils do not recognize when this point is reached.

Evaluate in terms of emotional reactions portrayed, facts cited, and consequences of various courses of actions. Sometimes teachers assume that they can evaluate their pupils' emotional reactions on the basis of how they play the roles. This is confusing psychodrama, a technique used by psychiatrists, with sociodrama. You asked the pupil to play a role; let's assume he is doing just that and avoid amateur diagnosis.

A final word. Plan carefully so that you will present a clear-cut problem situation that is interesting. Don't be discouraged if the first effort fails. Sociodrama will work with any age group from kindergarteners to adults, but older persons are more likely to laugh and be selfconscious and less likely to identify on first tries than younger children. After a little experience, the chief limitation of the technique is the lack of ingenuity of the teacher. •

Other Teaching Techniques

• A second-grade teacher tells us that every year she pins the following note to the children's jackets: "Dear Parents —If you'll promise not to believe everything your child tells you that happens at school, I'll promise not to believe everything I hear about what happens at home."—From *Mississippi Educational Advance.*

• The teacher was trying to build some selfconfidence in the shy fourth-grade boy. "Is there anything you can do better than anyone else?" she asked. After a moment's reflection, the boy replied, "Yassum. I can read my own handwriting."—From *Florida School Bulletin.*

A Recent Development

Certificate Requirements for Reading Specialists

CARL HAAG, DANIEL SAYLES, and DONALD SMITH
In The Reading Teacher

THE expansion of specialized reading instruction in both elementary and secondary schools is resulting in an increased demand for reading teachers. Curriculum surveys reveal that schools are rapidly increasing their specialized reading programs. The demand for teachers is apparent in teacher placement bureaus and in the swelling enrolment of college extension courses and workshops.

Since a rapidly increasing demand for personnel often leads to appointment of ill-prepared or marginal candidates, it seemed pertinent to determine what safeguards are operating. A survey of state certification agencies was undertaken to determine the extent of reading certification requirements.

Forty-six states responded to the questionnaire. States not reporting were: Arkansas, Kansas, Nevada, and Wyoming. Of those responding, 12 states have certification requirements for reading specialists. Thirty-four states have no such requirements.

While most of the state certification officers simply replied in the negative, a few pointed out that a regular teaching certificate is required. In Missouri, a Secondary English Certificate is necessary. It is assumed that all states require a teaching certificate as a minimum, but if others have limitations similar to Missouri, it is not revealed in the responses.

Carl Haag, Daniel Sayles, and Donald Smith are members of the faculty at the University of Michigan, Ann Arbor. Reported from The Reading Teacher, *XIV (November 1960), 98–100.*

Considerable variation in certification requirements was found among the 12 states that have enacted requirements. Academic requirements range from four to 36 hours beyond the work necessary for a bachelor's degree and a teaching certificate. Seven states require one year of classroom teaching experience, but only three states require an internship in a school or reading clinic. Three states require a master's degree.

The fact that eight of the 12 states which certify special reading teachers and consultants have enacted their requirements within the last five years seems to indicate that active interest is relatively recent. It seems reasonable to anticipate that this trend will continue, and that within the next decade more and more states will be providing for special certification of teachers of remedial and developmental reading. •

Some Guidelines to Practice

Understanding Intergroup Relations

JEAN D. GRAMBS

In NEA Journal

TEACHERS use the cultural differences existing in American life to enrich and adjust classroom instruction. In the community, however, these differences can cause conflicts and tensions. We must, therefore, seek to conserve the *value* of differences while encouraging pupils to learn how to live together cooperatively and democratically.

The following is a brief review of research related to intergroup relations that may be of help in school programs. Let us first consider some basic concepts.

Our biological family.—Anthropologists and biologists tell us that man belongs to one biological family. The physical differences in human appearance have occurred as adaptations to surroundings. Isolation of groups of people has led to selective repetition of those genes that determine skin color, hair color, eye shape, and other variations upon the same basic human theme.

Studies of civilizations miles apart and with no known connections show that again and again man has invented similar instruments and religious symbols. Hence, all men apparently have many similar spiritual and psychological needs.

Group selfesteem.—The belief that one's own culture is the center of all culture and the base for organizing one's life is called "ethnocentrism." This characteristic is found among the most primitive tribes and in the more complex societies. We like what we do. Our way of life is *right;* new and strange ways are considered *inferior.* This tendency toward group selfesteem is quite human, but it is based partly on ignorance. As groups learn about other groups, they discover that no group has a monopoly on superiority.

Man needs a place to stand.—Every person wants to belong to and be accepted by a group. When we are accepted as individuals, we feel secure and selfconfident. But this sense of security can be affected by the status of the group as a whole.

Jean D. Grambs is Lecturer in the College of Education, University of Maryland, College Park. *Reported from* NEA Journal, *IL (December 1960), 43–44.*

If a group is considered inferior by all surrounding groups, then the members of the low-rated group lose some of their confidence and selfesteem. This may lead to aggression, hostility, and other offensive behavior toward members of other groups. Children in the low-rated groups may turn their emotions toward the school. Seeking school achievement and getting along with others are types of "conformity" they often reject.

NO GROUP SUPERIOR

No group is superior.—Although individuals have many differences indicating their superiority in intelligence and skill to other individuals, the same does not hold true for groups. There is no such thing as *innate* group superiority. Distributions of intelligence test scores show extensive overlapping among racial groups. When educational and cultural opportunities are held constant, the differences in IQ scores often disappear.

Relationships are complex. — Numerous racial, ethnic, and religious differences are found. Cleavages, however, can occur on many other grounds. The boys of the neighborhood may feel that the girls have advantages; the older children may have hostile feelings toward the younger ones; the recent immigrants may be aggrieved about the long-time residents. Consideration of intergroup understanding must be extended to many kinds of group situations.

Some groups are more restricted than others.—Some of the most serious problems with intergroup relations are found with those groups where restrictions have been most repressive. These groups, often in the minority, are usually and readily distinguished by color of skin, dress, religious practices, and other characteristics. On certain racial and cultural differences, teachers find the strongest feelings and the most unreasonable difficulties, but also excellent opportunities for understanding intergroup relations.

The preceding paragraphs have presented some of the characteristics about groups that have been established after extensive study. The schools, especially the teachers, cannot ignore the group characteristics and differences that children bring into the school. Although physical differences cannot be erased, social and religious differences can be explained and respected; harmful and unnecessary differences can be modified or minimized.

The following paragraphs will attempt to establish some guidelines to practice that should aid in producing effective intergroup relations in the school setting.

Teachers must be objective. Without meaning to do so, classroom teachers sometimes favor one group over another. This is one explanation of why girls get fewer failing marks than boys. Influences of favoritism often help children from the "best homes" to obtain more school offices than children of minority groups.

Teachers who say, "There are no group differences in our community," should be willing to look for and examine the facts. Even in relatively homogeneous communities there may be concealed differences that would explain periodic group conflicts and pressures on individual children. When these impair the school's program, they cannot be ignored.

INSIGHT ON ATTITUDES

Attitudes are the major factors in intergroup relations. Today we have only the beginnings of insight into attitudes and how they can be changed. Our present knowledge suggests a few points of reference for the teacher:

Healthy group relationships are promoted when invidious comparisons are eliminated. Since many comparisons have little scientific basis, they can be avoided without loss.

Facts alone rarely change attitudes. Moral and emotional appeals must be made since attitudes are reflections of feelings.

Individuals are helped to change their attitudes through specific direct experiences. The Chinese are credited with saying that one picture is worth a thousand words. Similarly, a talk by a successful business or professional man from a minority group may be effective in offsetting an inaccurate perception of a group.

Experiencing an intergroup situation does not necessarily affect the attitudes of those involved. Intergroup contacts often must be discussed so that children understand the significance and the importance of differences. When improved behavior results, it should be recognized and approved.

Surface behavior and under-the-surface feelings may be quite different. Both children and adults learn to practice what is "expected," but learning new ideas and attitudes must involve sincerity of purpose and depth of feeling. Verbal conformity may not be indicative of change.

Children and youth need help in acquiring understanding of other individuals' feelings. When one tries to think from another's viewpoint, he acquires insight into intergroup situations. Role playing may help, but getting in the other fellow's shoes is not an easy thing.

Teachers can use to advantage the fights and clashes that disturb and disrupt school situations. These situations cannot be repressed or passed over. Each clash should be examined by the children themselves as to why it happened and what future behavior would be better for all.

There is little about intergroup relations that is easy. Both minority and majority group members must recognize that each has obligations; it's not a one-way street. The teacher who seeks to teach better understanding may be criticized for his efforts. Yet, the field involves many of our most important humanitarian and democratic values. •

Unrealistic in New York?

How Adequate Are Our Minimum Salaries?

BLANCHE V. WATERMAN
In New York State Education

NEW YORK state's minimum salary law, enacted in 1958, mandates a minimum teacher's salary of $4,000 in all districts. Each district employing eight or more teachers is required to adopt a local schedule which must contain at least nine annual increments, provide at least $4,600 and $5,600, respectively, for teachers in their fifth and tenth years of credited service, and include a differential of at least $300 above the bachelor's degree for teachers with a fifth year of preparation.

The highest minimum salary provided for inexperienced bachelor's degree teachers in the United States is California's $4,500 minimum (excepting Alaska's $4,650). The highest minimum for experienced teachers is provided by a 1960 Delaware law, which by 1963 will require a twelfth-year service minimum of $6,200 for bachelor's degree teachers.

A striking disparity is evident when the teacher's salary scales are contrasted with those in other fields. For civil service, the State of New York hires the majority of inexperienced college-graduate personnel under a program in which the recruiting salary is $4,600. The state also assumes the new employe's retirement contribution of 5 percent of salary—making, in effect, a starting salary of $4,830. A second year of service provides a salary increase to $4,988 with five annual increments thereafter until the seventh year of service provides a salary of $6,078.

Blanche V. Waterman is a Research Associate with the New York State Teachers Association. Reported from New York State Education, *XLVIII (January 1961), 23.*

The federal government is now recruiting inexperienced college graduates for civil service at salaries ranging from $4,345 to $6,345. Promotional opportunities make it possible to attain salaries ranging from $5,335 to $13,730 in six to seven years, depending on original qualifications and starting salary, job classification, and promotions.

New York's $4,000 minimum for teachers is becoming increasingly unrealistic for recruiting college graduates. The Endicott series of industry's recruiting salaries for inexperienced male college graduates shows that 1958 graduates were offered an average of $5,160, the 1959 graduates $5,268, and the 1960 graduates $5,496. If this trend continues, 1961 graduates will be offered an average of $5,600 or more—the minimum salary for a teacher after 10 years service. •

★ With Education in Washington ★

THE EDUCATION DIGEST WASHINGTON BUREAU

The New Administration.—John F. Kennedy repeatedly has underlined the crucial importance of education. Still, when he gave his state of the union message, he presented no details of his program.

First, there were more immediate problems to be tackled — foreign policy, the gold outflow, economic recession, and unemployment.

Next, there was his long fight over the House Rules Committee, won to be sure, but by a narrow margin. There's a warning here that the House consists of two parties which are almost equally balanced: Conservatives (better known as Republicans and Southern Democrats) and Liberals (Democrats with the support of a sprinkling of Republicans). The Liberals won the first round, 217-212.

At the same time, there was the aggravating problem of finding a new Commissioner of Education. There were suitable candidates for the $20,000-per-year job, but several of them couldn't afford the cut in pay. (School people don't make much to start with; if they get one of the few really top-paying jobs, they like to hang on to them. There are no stock options to facilitate the transition, and retirement plans often make the move even more expensive.) The successful man, Sterling McMurrin, was appointed only last month and won't settle down in Washington until early this month. He did not resign his job as academic vice-president of the University of Utah but took a leave of absence instead. (At least there is no conflict of financial interests and he is a higher education man to start with, so his leave of absence need not mean that he will be more or less inclined toward higher education.)

Then there is the peace corps. It may or may not be a truly educational program, but it seems to have captured the imagination of a lot of college people, educators, students. Recommendations on how to organize this program are in conflict. There was a task force report prepared by Max Millikan of MIT which pressed for high standards of selection; it sounded as if he were recommending nothing but honor graduates of a top-notch engineering school, with a sprinkling of English majors.

By way of contrast, Maurice Albertson of Colorado State University was under contract to study the feasibility of a peace corps. His preliminary report looked to the inclusion of people who had never been to college as long as they had ability and initiative. Fortunately, the reports agreed that the corps should start out small—say 500 members during the first year —and that there should be a period of orientation before the start of actual service.

One of the main functions of the corps would be to teach facts, skills, and methods, with English near the top of the list.

Again, this problem called for recommendations rather quickly, but there was no need for immediate decision.

Federal-Aid Decision.—The biggest decision in education was the perennial pressure for federal aid to education. In previous years the question was whether the Congress was prepared to vote federal funds or not; in 1961 the question was what kind of a bill the Administration should ask for.

During the campaign, the Democratic plea was for federal funds for teachers' salaries or for school construction; the Republicans asked for emergency, short-term help for construction only. Mr. Kennedy's six-man education task force assessed the need and found that the states should have a choice between construction and salary money. It recommended a package deal which would cost more money than even the National Education Association had dared to recommend.

New figures released by the U.S. Office of Education reinforce the need for action. These figures show that the classroom shortage has grown from 135,200 in 1960 to 142,100 in 1961. (To be sure, 69,400 units were built in 1960, but this was below the peak construction rate of 72,100 completions in 1957-58.)

Given the close vote on the Rules issue in the House, there was hesitation in the White House on what to recommend to the Congress to strengthen public education.

Higher Education Needs. — Finally, there should be recommendations to the Congress on the needs of higher education. A quick executive order had speeded things up by releasing an additional $100 million for college housing. This sum had been held up under the old administration in an attempt to get the budget a bit closer to balance, even though the actual expenditures might be as much as two years away, for it takes that long from commitment of the loan fund to go through blueprints and planning toward actual construction.

The real decision hinged on grants and loans for academic facilities, as recommended by the task force, and the proposal for scholarships which might be restored to the National Defense Education Act, from which they had been stricken during debate in 1958.

Other Decisions. — There were also a host of relatively minor educational decisions to be made:

√The Senate last year passed a bill to provide $1 million for each state for construction of educational television stations. The bill died in the House Rules Committee, but a similar version is now pending in the Senate. Hearings are to start early this month before

the Senate Commerce Committee.

√The federally impacted areas program is due to expire in June. The Eisenhower budget called for decisive cuts, based primarily on the assumption that federal employes who lived in private homes, subject to local taxation, should not be counted as part of the federal impact on an area. Congress in recent years has not accepted this view.

√The National Defense Education Act expires in the summer of 1962. To maintain continuity, its extension should be debated and decided this year, not next. The program has its critics and its boosters. There are also those who ask first for passage of a broad federal-aid bill, with an evaluation of NDEA to follow so that the two programs can be coordinated.

√Benefits for veterans are sure to come up. Sen. Ralph Yarborough, Texas Democrat, is again advocating a measure to give educational benefits to those veterans who served after the Korean action. It's usually known as the Cold War GI Bill. Another Texas Democrat, Rep. Olin Teague, is chairman of the House Veterans Committee which may feel that other veterans' bills are more important. As yet, there is no clear evidence of backing or opposition for this bill, but sooner or later it will come up.

√Other education bills introduced in Congress are indicative of a variety of interests: tax exemptions, tax credits, driver education, school lunch and milk, exceptional children, spelling, international education, and the end is not in sight.

Civil Rights.—After 12 months of study, the U.S. Civil Rights Commission accused the federal government of being "a silent partner in the creation and perpetuation of separate colleges for Negroes." It called for future spending of federal funds to be confined to public institutions that do not discriminate on grounds of race, color, religion, or national origin.

Next, the Commission said that deprivation at the high-school level leads to more deprivation at the college level. It noted that in six states, described as "resistant," the public high schools "present a picture of deprivation varying . . . from a low of 2.6 percent Negro high schools approved by the Southern Association of Colleges and Secondary Schools as compared with 52.4 percent white in Mississippi, to a high of 53.9 percent Negro and 84.1 percent white high schools so approved in Florida." The six states are Louisiana, Florida, Mississippi, South Carolina, Alabama, and Georgia.

"This inferior preparation of the Negro high-school student in the segregated high school of the South helps to perpetuate the problem of segregation and discrimination at the college level. Proportionately fewer academically talented Negroes have the education foundation required for success in a first-

rate college. The graduates of segregated and inferior high schools tend, therefore, in overwhelming numbers to attend segregated and generally inferior colleges.

The Commission, in calling for better control over the spending of federal funds for higher education, also warned that this must not lead to direction, supervision, or control over "the administration, curriculums, or personnel of an institution operated and maintained by a state or a political subdivision thereof."

Implications of the report for other programs of federal aid to education, present and future, seem clear enough. Rep. Adam Clayton Powell, New York Democrat and new head of the House Committee on Education and Labor, quickly pointed out that the federal government has the power to withhold funds from segregated school districts, a position he has long maintained. Because the federal government has not used this power, he explained, he had found it necessary in the past to offer his amendment which seeks to achieve the same end.

Where There's Smoke. – "Teachers are permitted to smoke in designated places within the school building in 86.3 percent of urban school districts," reports the NEA Research Division on the basis of replies to a questionnaire. Scoring highest were medium-sized school districts.

For students of high-school age, provision for smoking is made in less than 14 percent of urban school districts, with the smallest districts least liberal in their policies. A bit more than 2 percent of districts are considering the possibility of liberalizing their policies for teachers and students who wish to smoke legitimately in some part of the school grounds.

Dictionary of Degrees.—The U.S. Office of Education has published *Academic Degrees*, more than 300 pages of details about the more than 1600 different degrees currently being conferred in the U.S. In addition, there are 800 other degrees no longer in current use.

The new book seeks to organize the confusion and recommends that the variety of degrees be reduced. Similarly, it urges greater uniformity in designation and abbreviation. One by-product of the current redundancy is the victimization of students by "fraudulent institutions that award degrees without the rigorous courses of study prescribed by legitimate institutions."

The degree mills have offered more than 250 "spurious" degrees, many of which use the same designation as those offered by legitimate institutions. Others are unique: Doctor of Naturaltrics, Philosopher of Metaphysics, or Diploma of Massatherapy.

Now obsolete are some nineteenth century distortions by legitimate institutions which sought to accommodate their female graduates: Mistress of Arts, Maid of Arts, or Sister of Arts. •

• Educational News •

CHANGES IN SUPERINTENDENCIES:

Chillicothe, Ohio: **Paul W. Hydell,** formerly assistant superintendent, has been named successor to the late **Ellis B. Hatton.**

Lynchburg, Va.: **Marvin L. Carper,** formerly of Martinsville, Va., will succeed **Paul M. Munro** on his retirement in July.

Oak Park, Ill.: **Charles W. Lafferty,** superintendent of the elementary schools, has resigned, effective June 30.

Palo Alto, Calif.: **Robert H. Johnson, Jr.,** superintendent at Lakewood, Colo., has been named successor to **Henry M. Gunn,** retiring.

Freeport, N.Y.: **John W. Dodd,** superintendent for 36 years, will retire in June.

Rutherford, N.J.: **David J. Brittain,** formerly professor of education at New York University and principal of Clinton, Tenn., at the time of its integration crisis, is now superintendent, succeeding **Bernhard W. Schneider,** now superintendent at Northport, N.Y.

Long Branch, N J.: **William H. Meskill** has succeeded **Harmon M. Bradford,** retired, now on the business administration faculty at Monmouth College.

Elizabeth, N.J.: **Harry S. Adams** has resigned to become assistant commissioner, New Jersey State Department of Education.

COLLEGE PRESIDENTS:

Williams College, Williamstown, Mass.: **John E. Sawyer,** associate professor of economic history, Yale University, will become president July 1, succeeding **James Phinney Baxter III.**

Southwest Missouri State College, Springfield: **Leland E. Traywick,** professor of economics, Michigan State University, East Lansing, has been named successor to **Roy Ellis,** who retires Aug. 31.

Cornell University, Ithaca, N.Y.: **Deane W. Malott,** president since 1951, has announced his retirement in June 1963.

Eastern Oklahoma Agricultural and Mechanical College, Wilburton: **E. T. Dunlap** will leave the presidency July 1 to become chancellor of the Oklahoma State Regents for Higher Education, Oklahoma City, succeeding **M. A. Nash,** retiring.

State College at Framingham, Mass.: **D. Justin McCarthy,** formerly director of state colleges, Massachusetts Department of Public Instruction, has succeeded **Martin F. O'Connor,** retired.

Drew University, Madison, N.J.: **Robert F. Oxnam,** formerly president of Pratt Institute, Brooklyn, N.Y., is now president.

The Cooper Union, New York City: **Richard Franklin Humphreys,** vice-president of Armour Research Foundation, Illinois Institute of Technology, Chicago, Ill., has been named successor to **Edwin S. Burdell,** retired.

Hood College, Frederick, Md.: **Andrew G. Truxal** has announced his resignation to become dean of the new Ann Arundel Junior College, Severna Park, Md., in September.

TEACHER-TRAINING INSTITUTIONS:

George Peabody College for Teachers, Nashville, Tenn.: **M. E. Alford,** formerly assistant superintendent in charge of instruction, Norfolk County schools, Va., has been appointed professor of education.

University of Kentucky, Lexington: **James B. Kincheloe,** superintendent of Fayette County schools, Lexington, will become professor of education, July 1.

San Jose State College, Calif.: **Henry M. Gunn,** who is retiring as superintendent, Palo Alto, Calif., has been appointed professor of school administration, effective in June.

University of Wisconsin, Milwaukee: **George E. Watson,** retiring state superintendent of public instruction, has been appointed professor of education, effective in September.

Beaver College, Jenkintown, Pa.: **Ira R. Kraybill,** retired executive secretary of the Middle States Commission on Secondary Schools, has been named acting head of the department of education, succeeding the late **John E. Dugan.**

University of Chicago, Ill.: **Roald F. Campbell,** director of the Midwest Administration Center, has been named first William Claude Reavis Professor of Educational Administration.

University of Miami, Coral Gables, Fla.: **Emmett A. Betts,** director of The Betts Reading Clinic, Haverford, Pa., and editor-in-chief of *Education,* has been named research professor in psychology and education in the graduate school.

Other Changes

Appointments:

T. G. O'Keefe has succeeded **Walton B. Bliss,** retired, as executive secretary of the Ohio Education Association.

Rex Putnam, Oregon state superintendent of public instruction since 1937, has retired for health reasons. Named to fill his unexpired term until Dec. 31, 1962 is **Leon P. Minear,** formerly principal of Benson Polytechnic High School, Portland.

Kenneth E. Dawson, formerly a teacher in the Montgomery County, Md., public schools, has been appointed the first full-time executive secretary of the American Industrial Arts Association.

The Rev. Theodore M. Hesburgh, president of the University of Notre Dame, is the new president of the Association of American Colleges, succeeding **David A. Lockmiller.**

Recent Deaths:

Irving Lorge, professor of education and executive officer of the Institute of Psychological Research, Teachers College, Columbia University, at the age of 56. An authority on the psychology of learning, he had devised more than 50 standard psychological tests.

John W. Withers, dean emeritus of the school of education, New York University, and a former superintendent of schools at St. Louis, Mo., at the age of 92.

NASSP Convention

Testing of high-school students for admission to college and for scholarships is getting "completely out of hand," Charles C. Holt told members of the National Association of Secondary-School Principals at the Association's 45th annual convention in Detroit, Feb. 11-15.

Mr. Holt, who is director of a joint project on testing being sponsored by the NASSP, the American Association of School Administrators, and the Council of Chief State School Officers, reported that while some sort of testing for scholarships and college admission is necessary, there are too many such tests and too much duplication in what they try to measure. In addition to being expensive, there are some things, such as creativity, motivation, and determination, which testing cannot measure, he said.

Another speaker at the convention, David D. Henry, president of the University of Illinois, proposed the creation of a "council of advisers to the President" which would function outside the control of the federal government and which would serve as "the national instrument for the appraisal of the

condition of education." The council would function in the same manner as the Council of Economic Advisers and the Council of Science Advisers.

Attendance at the convention hit an all-time record, 6,500, as the NASSP returned to Detroit for the first time since it was founded there in 1916. James D. Lofsden, superintendent of Thornton Township High School and Junior College, Harvey, Ill., was installed as president of the organization, succeeding James E. Nancarrow, principal of Upper Darby Senior High School, Pa.

Unesco Expands Program

AN expanded education program was a principal accomplishment of the Unesco Eleventh General Conference, recently held in Paris.

The Conference decided that Unesco would assist member states in the improvement of teacher-training and curriculum development, in the development of methods for teaching science and modern languages, and in the use of audio-visual aids. More than 200 experts will be provided to member states for these purposes.

African needs held the main educational spotlight. African education projects coming from the Conference include the creation of centers for the training of teachers, a regional office for educational research, the organization of training courses and seminars for senior personnel, and assistance to secondary education, to universities, and to adult education. An educational emergency assistance program for the Congo (Leopoldville), financed by the United Nations, also was approved.

Higher Education Aid

THE American Council on Education in February published *A Proposed Program of Federal Action to Strengthen Higher Education* which presented three basic recommendations for federal support.

The Council recommendations, in order of urgency and priorities, are: $350 million annually in loans for dormitories and an average of $1 billion annually for loans and matching grants for classrooms, libraries, and laboratories; a broad expansion of fellowship programs to increase the supply and improve the quality of college teachers; and greater financial assistance for qualified college students. The last would include provision for a minimum of 25,000 new scholarships each year, including a new program of scholarships starting with $25 million the first year and rising to a total annual expenditure of $100 million in the fourth year.

The Council, speaking for more than 1,200 member institutions and organizations, reported general agreement on an anticipated increase of at least a million full-time students between 1958 and 1965 and another million between 1965 and 1970, with a consequent rise in costs. This will require greater support from the federal government, it stated.

Report on Merit Scholars

AMERICA's first class of Merit Scholars achieved a distinguished record of academic and extracurricular leadership in college, the National Merit Scholarship Corporation announced in its recently-issued 1960 annual report.

The report reveals that almost 80 percent of the 461 Merit scholars who received their degrees in 1960 or before were graduated with academic honors. More than 60 percent of the graduates were elected to one or more national academic honor societies. Almost all graduates were active in extracurricular organizations, and nearly one in five won national or campus honors for student leadership. Three out of four former Scholars are now enrolled in graduate or professional studies, and nearly eight out of 10 of them hold a fellowship or assistantship. And all but 10 of the 555 students in the first class are expected to obtain a college degree.

The Merit Scholarship Corporation points out that these statistics take on added significance when it is considered that these Merit Scholars were selected from a wide variety of family, social, economic, geographical, and educational backgrounds. Furthermore, they chose their own colleges and curriculums, and most of them enrolled in colleges where competition is keen and in demanding courses of study.

New Conant Study

TEACHER education and certification will be the subject of the next study by James B. Conant. Announcement of a $300,000 grant for the study was made in February by the Carnegie Corporation.

Dr. Conant, who has completed two studies on American education —*The American High School Today* and *Education in the Junior High School Years*—will begin this new two-year study in September. Among the topics to be included will be the preparation of public-school teachers and the criterions for their employment as established by local, regional, and state education authorities.

On his staff for the first year will be John I. Goodlad, professor in the school of education, University of California, Los Angeles; Jeremiah S. Finch, Princeton University; William Cartwright, Duke University; Robert Carbone, University of Chicago; and E. Alden Dunham, a member of Dr. Conant's staff for the past three years.

The Education Testing Service, Princeton, N.J., will administer the grant for the study.

Invalidates Oath Law

A CALIFORNIA law that required declarations of loyalty from organizations seeking to use public-school facilities was held unconstitutional in January by the California State Supreme Court.

The court ordered the school boards of Los Angeles and San Diego to open school auditoriums to meetings of the American Civil Liberties Union without first de-

manding assurance that the organization does not advocate violent overthrow of the government.

The court's opinion observed that in the struggle against the Communist threat "we must be careful not to adopt the Communist methods."

NET Department

NATIONAL Educational Television (NET) in February established a new Department of Utilization to develop maximum educational effectiveness of selected NET programs.

The new department will work with NET's affiliated stations and with educational institutions to plan and develop systematic study-discussion programs and other educational programs for adults.

John F. White, NET president, reports that unlike most commercial programs, which are entities in themselves, the NET program is most successful if, when it is over, it stimulates the viewer to snap off the set and do something—get a book and read further on the subject or seek out a discussion group." The new department will attempt to foster this.

Henry Alter is director of the new department, for which the Fund for Adult Education has made a grant of $200,000.

ASCD Convention

JAMES B. CONANT will head the list of general session speakers at the 16th annual conference of The Association for Supervision and Curriculum Development, to be held Mar. 12-16 in Chicago, Ill.

Dr. Conant, author of recent studies on the American high school and junior-high school, will speak on "Trial and Error in the Improvement of Education."

DATES OF THE MONTH:

Mar. 5-8, Association for Higher Education, Chicago, Ill.

Mar. 11-14, American Association of School Administrators, regional meeting, St. Louis, Mo.

Mar. 12-16, Association for Supervision and Curriculum Development, Chicago, Ill.

Mar. 18-22, Department of Elementary School Principals, NEA, Atlantic City, N.J.

Mar. 25-28, American Association of School Administrators, regional conference, Philadelphia, Pa.

Mar. 25-29, National Science Teachers Association, Chicago, Ill.

DATES OF THE COMING MONTHS:

April 2-7, Association for Childhood Education International, Omaha, Neb.

April 4-7, National Catholic Educational Association, Atlantic City, N.J.

April 4-7, American Industrial Arts Association, St. Louis, Mo.

April 4-8, National Council of Teachers of Mathematics, Chicago, Ill.

April 10-15, National Art Education Association, Miami Beach, Fla.

April 16-22, National Library Week.

April 19-22, National Association for Gifted Children, New York, N.Y.

April 24-28, Department of Audio-Visual Instruction, NEA, Miami Beach, Fla.

June 25-30, National Education Association, Atlantic City, N.J. •

The Creative Individual. Harriet E. Peet. New York: The Ronald Press Company, 1960. Pp. xi + 188. $4.50.

Emphasizing that the need for creative individuals capable of assuming responsibility and making wise decisions is becoming increasingly greater, the author examines the maturing of the individual during present and near-future conditions.

The author discusses the development in children of a wholesome attitude toward life and of the ability to think clearly and to live up to the ideals of behavior that leads to selffulfillment and social competence. Attention is drawn to the stages through which an individual passes as he grows into maturity and to the ways of meeting his needs at each stage. The problems of the mature student and of the adults in a community are also considered.

Teaching for Critical Thinking. C. Burleigh Wellington and Jean Wellington. New York: McGraw-Hill Book Co., Inc., 1960. Pp. vii + 364. $6.50.

With emphasis on teaching at the secondary-school level, this book describes the development of a talented teacher by discussing both his aim for critical thinking and the method for achieving it.

The authors, both professors of education at Tufts University, believe that each of us possesses a basic aptitude for teaching, but only by developing this aptitude through study and effort can one become a good teacher. The authors describe this development by discussing both the aim and basic method as they see them. Concepts and techniques discussed in the book are accompanied by their philosophic or psychological implications. Applications are discussed in case form.

The authors declare it is their purpose not so much to gain agreement as to offer new possibilities. "Believe us if you can," they say. "Disagree if you must; but think and become concerned about the ideas and thoughts presented."

Education in the Nation's Service. New York: Frederick A. Praeger, Publishers, 1960. Pp. x + 193. $4.75.

This book consists of eight essays by prominent American educators analyzing our educational system today. They were conceived in answer to the question of how colleges and universities can best serve the nation today. The essays were commissioned by The Woodrow Wilson Foundation.

The authors included in the volume are Archibald MacLeish, McGeorge Bundy, Robert F. Goheen, Logan Wilson, Harry D. Gideonse, Jacques Barzun, John Hersey, and William Lee Miller. These writers examine scores of problems and issues in the field of education today.

The introduction to the book is written by August Heckscher, president of The Woodrow Wilson Foundation.

The Education of Nations. Robert Ulich. Cambridge, Mass.: Harvard University Press, 1961. Pp. xiii + 325. $6.75.

Both historical and comparative methods are used by the author of this book in discussing the forces that have molded the educational systems and ideals of a number of nations. He subtitles the book "A Comparison in Historical Perspective."

After a section on historical and cultural foundations, the author, who

is a James Bryant Conant Professor of Education, Emeritus, at Harvard University, discusses education in the individual countries—England, France, Germany, United States, Russia, and the "new nations" of Asia and Africa. He proposes principles of action in contacts between the U. S. and statesmen and educators of Asia and Africa to obviate the severe danger that threatens humanity if the new countries "understand Western education merely as a road toward technological efficiency and power, without seeing its deeper moorings."

Graduate Education in the United States. Bernard Berelson. New York: McGraw-Hill Book Co., Inc., 1960. Pp. vi + 346. $6.95.

Another volume in the Carnegie Series in American Education, this book brings together all the important data on graduate education available. It consists of three sections: Part one reviews the history of graduate education in this country, exploring its growth, development, and present status in the educational system. Part two is an analysis of the programs and issues current in the system of graduate education. Part three presents the author's conclusions, commentary, and recommendations for a course of action.

The book also contains a detailed appendix, including a bibliography and statistical information concerned with the study.

Mr. Berelson, a former dean of the Graduate Library School at the University of Chicago and the present director of the Bureau of Applied Social Research, Columbia University, concludes the introduction to this book with the statement:

". . . One dean advised me to 'write a short, concise report with clear recommendations.' Another advised me to 'go out on a limb' in saying what ought to be done. The third advised me to 'stick to the facts.' I have tried to follow the advice of all three."

OTHER MATERIALS RECEIVED:

ELEMENTARY

Science Is Fun, Science Is Learning, and **Science Is Exploring.** Wilbur L. Beauchamp and Helen J. Challand. Chicago: Scott, Foresman and Company, 1961. Pp. 112, 128, and 168. First-, second-, and third-grade texts in the new Basic Science Program. Pupils' editions, $2.20, $2.44, and $2.68, respectively. Teachers' editions include a guidebook in an unusual handy form.

Don't Push Me! Edited by Margaret Rasmussen. Washington, D.C.: Association for Childhood Education International, 1960, Pp. 40. $.75. Contains 11 articles on pressures and children.

Red Man, White Man, African Chief; The Story of Skin Color; and **Lefty, The Story of Left-Handedness.** Marguerite Rush Lerner. Minneapolis, Minn.: Medical Books for Children, 1960. Pp. 30. $2.75 each.

At a Zoo. Henri Wenkart. Cambridge, Mass.: Henri Wenkart, 1960. Pp. 23. $.58. First of a series of early books for children learning to read by phonics system.

Mathematics, Grade 7. Curriculum Bulletin No. 2, 1959-60, New York City Board of Education. Pp. 199. Available from New York Board of Education Publications Sales Office, 110 Livingston St., Brooklyn 1, N.Y. $1.00.

Elementary Concepts of Sets. Edith J. Woodward and Roderick C. McLennan. New York: Holt, Rinehart and Winston, Inc., 1960. Pp. v + 50. $.60.

SECONDARY

Adventure Bound and **Journeys into America.** Arno Jewett, Marion Edman, *et al.* Boston: Houghton Mifflin Company, 1961. Pp. x + 630 and x +

662. $4.12 and $4.20, respectively. Books 7 and 8 in Reading for Meaning program.

Tested Timed Writings. (Second Edition.) M. Fred Tidwell, Mary L. Bell, and Leonard J. Porter. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1960. Pp. 64. $1.36. For typing tests.

Social Studies in Secondary Schools; Curriculum and Methods. Dorothy McClure Fraser and Edith West. New York: The Ronald Press Company, 1961. Pp. vi + 476. $6.50.

General

Study Abroad, 1960-61. Unesco. Available from International Documents Service, Columbia University Press, New York. Pp. 766. $3.00. An international handbook of fellowships, scholarships, and educational exchanges.

Why Children Become Delinquent. John M. Gran. Baltimore: Helicon Press, 1961. Pp. 200. $3.95.

Mechanical - Electrical Equipment Handbook for School Buildings; Installation, Maintenance and Use. Harry Terry. New York: John Wiley & Sons, Inc., 1960. Pp. xi + 412.

A Teacher's Guide to Children's Books. Nancy Larrick. Columbus, Ohio: Charles E. Merrill Books, Inc., 1960. Pp. xx + 316. $4.95.

Historical Fiction and **Historical Non-Fiction.** (Seventh Editions.) Compiled by Hannah Logasa. Philadelphia: McKinley Publishing Co., 1960. Pp. 316 and 288. $6.50 each; $12.00 for the set. These lists of historical books, formerly published together, are now in separate books.

Taxes for the Schools. Roger A. Freeman. Washington, D.C.: The Institute for Social Science Research, 1960. Pp. xxxvii + 441. $5.00. Vol. 2 in the research project, "Financing the Public Schools." The first volume was *School Needs in the Decade Ahead*, published in 1958.

MENTAL RETARDATION

Readings and Resources

Edited by JEROME H. ROTHSTEIN, San Francisco State College. An important addition to this field of special concern, this book of 55 articles, bound together by the editor's excellent introductory notes, concentrates primarily on material published within the past five years. A wealth of special resource material includes lists of films and materials, lists of curriculum guides, and reading lists for parents.

CONTENTS: General Considerations; Assessment, Diagnosis, and Classification of Mental Retardation; Implications of Mental Retardation; Learning Theory and Mental Retardation; School Programs for the Educable Mentally Retarded; Secondary School Programs for the Mentally Retarded; School Programs for the Trainable Retarded Child; Postschool Programs for the Mentally Retarded; Institutional Programs; Speech Development for the Mentally Retarded; Parent Counseling; National, State, and Local Programs; Teachers of the Mentally Retarded; Research; A Look at the Future. May, 1961, 608 pp., $5.75, tentative.

Holt, Rinehart and Winston, Inc.
383 Madison Ave., N.Y.

Reading and the Psychology of Perception. Hunter Diack. New York: Philosophical Library, Inc., 1960. Pp. xxiii + 155. $6.00.

Gregg Notehand. Louis A. Leslie, Charles E. Zoubek, and James Deese. New York: Gregg Publishing Division, McGraw-Hill Book Company, Inc., 1960. Pp. 320. $5.95. A personal-use shorthand with integrated instruction in how to make notes.

Purchase Guide for Programs in Science, Mathematics, Modern Foreign Languages. Prepared by the Council of Chief State School Officers and the Educational Facilities Laboratories, Inc. Boston: Ginn and Company, 1960. Pp. vii + 336. $3.95.

Organization of Special Education for Mentally Deficient Children. International Bureau of Education. New York: Columbia University Press, International Documents Service, 1960. Pp. 272. $3.00.

Audio-Visuals

Demasiados Perros and **El Hoyo del Cerro.** Chicago: Follett Publishing Company, 1960. Beginning-to-read Spanish books and companion record. Books, $1.25 each. Record, 33 1/3 LP, $3.50.

Panorama. A new audio-visual program offered as a subscription service of Columbia Record Club, New York City. A free colorslide projector with a one-year subscription. Monthly package includes a set of 32 single-frame 35mm color filmstrip, a book, and a 7" LP record. Three subject categories available: travel, art, and nature and science.

The Tape Recorder in the Classroom. Julia Mellenbruch. Austin, Tex.: University of Texas Visual Instruction Bureau, 1959. Pp. 67. $2.00

The Life and Death of a Cell. A 16mm color, sound movie. Available from Department of Visual Communication, University Extension, University of California, Los Angeles. $195. Also available for rental.

First Experiments with Air. A series of five color filmstrips. Available from The Jam Handy Organization, Detroit, Mich. $26.25 for the series; $5.75 each filmstrip.

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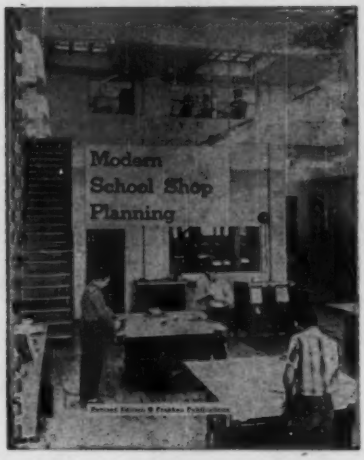

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